# r1 neg v. west georgia df

### 1nc

#### The resolution indicates affs should advocate topical government change

**Ericson 3** (Jon M., Dean Emeritus of the College of Liberal Arts – California Polytechnic U., et al., The Debater’s Guide, Third Edition, p. 4)

The Proposition of Policy: Urging Future Action In policy propositions, each topic contains certain key elements, although they have slightly different functions from comparable elements of value-oriented propositions. 1. An agent doing the acting ---“The United States” in “The United States should adopt a policy of free trade.” Like the object of evaluation in a proposition of value, the agent is the subject of the sentence. 2. The verb should—the first part of a verb phrase that urges action. 3. An action verb to follow should in the should-verb combination. For example, should adopt here means to put a program or policy into action though governmental means. 4. A specification of directions or a limitation of the action desired. The phrase free trade, for example, gives direction and limits to the topic, which would, for example, eliminate consideration of increasing tariffs, discussing diplomatic recognition, or discussing interstate commerce. Propositions of policy deal with future action. Nothing has yet occurred. The entire debate is about whether something ought to occur. What you agree to do, then, when you accept the affirmative side in such a debate is to offer sufficient and compelling reasons for an audience to perform the future action that you propose.

#### Specific, limited resolutions ensure mutual ground which is key to sustainable controversy without sacrificing creativity or openness

**Steinberg & Freeley 8** \*Austin J. Freeley is a Boston based attorney who focuses on criminal, personal injury and civil rights law, AND \*\*David L. Steinberg , Lecturer of Communication Studies @ U Miami, Argumentation and Debate: Critical Thinking for Reasoned Decision Making pp45-

Debate is a means of settling differences, so there must be a difference of opinion or a conflict of interest before there can be a debate. If everyone is in agreement on a tact or value or policy, there is no need for debate: the matter can be settled by unanimous consent. Thus, for example, it would be pointless to attempt to debate "Resolved: That two plus two equals four," because there is simply no controversy about this statement. (Controversy is an essential prerequisite of debate. Where there is no clash of ideas, proposals, interests, or expressed positions on issues, there is no debate. In addition, debate cannot produce effective decisions without clear identification of a question or questions to be answered. For example, general argument may occur about the **broad topic** of illegal immigration. How many illegal immigrants are in the United States? What is the impact of illegal immigration and immigrants on our economy? What is their impact on our communities? Do they commit crimes? Do they take jobs from American workers? Do they pay taxes? Do they require social services? Is it a problem that some do not speak English? Is it the responsibility of employers to discourage illegal immigration by not hiring undocumented workers? Should they have the opportunity- to gain citizenship? Docs illegal immigration pose a security threat to our country? Do illegal immigrants do work that American workers are unwilling to do? Are their rights as workers and as human beings at risk due to their status? Are they abused by employers, law enforcement, housing, and businesses? I low are their families impacted by their status? What is the moral and philosophical obligation of a nation state to maintain its borders? Should we build a wall on the Mexican border, establish a national identification can!, or enforce existing laws against employers? Should we invite immigrants to become U.S. citizens? Surely you can think of many more concerns to be addressed by a conversation about the topic area of illegal immigration. Participation in this "debate" is likely to be emotional and intense. However, it is not likely to be productive or useful without focus on a particular question and identification of a line demarcating sides in the controversy. To be discussed and resolved effectively, controversies must be stated clearly. **Vague understanding** results in unfocused deliberation and poor decisions, frustration, and emotional distress, as evidenced by the failure of the United States Congress to make progress on the immigration debate during the summer of 2007.

Someone disturbed by the problem of the growing underclass of poorly educated, socially disenfranchised youths might observe, "Public schools are doing a terrible job! They are overcrowded, and many teachers are poorly qualified in their subject areas. Even the best teachers can do little more than struggle to maintain order in their classrooms." That same concerned citizen, facing a complex range of issues, might arrive at an unhelpful decision, such as "We ought to do something about this" or. worse. "It's too complicated a problem to deal with." Groups of concerned citizens worried about the state of public education could join together to express their frustrations, anger, disillusionment, and emotions regarding the schools, but without a focus for their discussions, they could easily agree about the sorry state of education **without** finding points of clarity or potential solutions. A gripe session would follow. But if a precise question is posed—such as "What can be done to improve public education?"—then a more profitable area of discussion is opened up simply by placing a focus on the search for a concrete solution step. One or more judgments can be phrased in the form of debate propositions, motions for parliamentary debate, or bills for legislative assemblies. The statements "Resolved: That the federal government should implement a program of charter schools in at-risk communities" and "Resolved: That the state of Florida should adopt a school voucher program" more clearly identify specific ways of dealing with educational problems in a manageable form, suitable for debate. They provide specific policies to be investigated and aid discussants in identifying points of difference.

To have a productive debate, which facilitates effective decision making by directing and placing limits on the decision to be made, the basis for argument should be clearly defined. If we merely talk about "homelessness" or "abortion" or "crime'\* or "global warming" we are likely to have an interesting discussion but not to establish profitable basis for argument. For example, the statement "Resolved: That the pen is mightier than the sword" is debatable, yet fails to provide much basis for clear argumentation. If we take this statement to mean that the written word is more effective than physical force for some purposes, we can identify a problem area: the comparative effectiveness of writing or physical force for a specific purpose.

Although we now have a general subject, we have not yet stated a problem. It is still too broad, too loosely worded to promote well-organized argument. What sort of writing are we concerned with—poems, novels, government documents, website development, advertising, or what? What does "effectiveness" mean in this context? What kind of physical force is being compared—fists, dueling swords, bazookas, nuclear weapons, or what? A more specific question might be. "Would a mutual defense treaty or a visit by our fleet be more effective in assuring Liurania of our support in a certain crisis?" The basis for argument could be phrased in a debate proposition such as "Resolved: That the United States should enter into a mutual defense treatv with Laurania." Negative advocates might oppose this proposition by arguing that fleet maneuvers would be a better solution. This is not to say that debates should completely avoid creative interpretation of the controversy by advocates, or that good debates cannot occur over competing interpretations of the controversy; in fact, these sorts of debates may be very engaging. The point is that debate is best facilitated by the guidance provided by **focus on a particular point of difference**, which will be outlined in the following discussion.

#### Deliberation requires a predetermined subject—they over-determine the rez more than us by assuming debates are the ultimate arbiter of its value as opposed to a means to facilitate clash

Adolf G. **Gundersen,** Associate Professor of Political Science, Texas A&M, **2000**

POLITICAL THEORY AND PARTISAN POLITICS, 2000, p. 104-5. (DRGNS/E625)

Indirect political engagement is perhaps the single most important element of the strategy I am recommending here. It is also the most emblematic, as it results from a fusion of confrontation and separation. But what kind of political engagement might conceivably qualify as being both confrontational and separated from actual political decision-making? There is only one type, so far as I can see, and that is deliberation. Political deliberation is by definition a form of engagement with the collectivity of which one is a member. This is all the more true when two or more citizens deliberate together. Yet deliberation is also a form of political action that **precedes the actual** taking and **implementation** of decisions. It is thus simultaneously connected and disconnected, confrontational and separate. It is, in other words, a form of indirect political engagement. This conclusion, namely, that we ought to call upon deliberation to counter partisanship and thus clear the way for deliberation, looks rather circular at first glance. And, semantically at least, it certainly is. Yet this ought not to concern us very much. Politics, after all, is not a matter of avoiding semantic inconveniences, but of doing the right thing and getting desirable results. In political theory, therefore, the real concern is always whether a circular argument translates into a self-defeating prescription. And here that is plainly not the case, for what I am suggesting is that deliberation can diminish partisanship, which will in turn contribute to conditions amenable to continued or extended deliberation. That "deliberation promotes deliberation" is surely a circular claim, but it is just as surely an accurate description of the real world of lived politics, as observers as far back as Thucydides have documented. It may well be that deliberation rests on certain preconditions. I am not arguing that there is no such thing as a deliberative "first cause." Indeed, it seems obvious to me both that deliberators **require something to deliberate about and that** deliberation **presumes certain institutional structures** and shared values. Clearly something must get the deliberative ball rolling and, to keep it rolling, the cultural terrain must be free of deep chasms and sinkholes. Nevertheless, however extensive and demanding deliberation's preconditions might be, we ought not to lose sight of the fact that, once begun, deliberation tends to be self-sustaining. Just as partisanship begets partisanship, deliberation begets deliberation. If that is so, the question of limiting partisanship and stimulating deliberation are to an important extent the same question.

#### Competition through fair play is a dialogical process that encourages argumentative testing and mutual recognition of personhood

**Rawls 58** – a leading figure in moral and political philosophy (John, Justice as Fairness, Philosophical Review, April, JSTOR)

Similarly, the acceptance of the duty of fair play by participants in a common practice is a reflection in each person of the recognition of the aspirations and interests of the others to be realized by their joint activity. Failing a special explanation, their acceptance of it is a necessary part of the criterion for their recognizing one another as persons with similar interests and capacities, as the conception of their relations in the general position supposes them to be. Otherwise they would show no recognition of one another as persons with similar capacities and interests, and indeed, in some cases perhaps hypothetical, they would not recognize one another as persons at all, but as complicated objects involved in a complicated activity. To recognize another as a person one must respond to him and act towards him in certain ways; and these ways are intimately connected with the various prima facie duties. Acknowledging these duties in some degree, and so having the elements of morality, is not a matter of choice, or of intuiting moral qualities, or a matter of the expression of feelings or attitudes (the three interpretations between which philosophical opinion frequently oscillates); it is simply the possession of one of the forms of conduct in which the recognition of others as persons is manifested. These remarks are unhappily obscure. Their main purpose here, however, is to forestall, together with the remarks in Section 4, the misinterpretation that, on the view presented, the acceptance of justice and the acknowledgment of the duty of fair play depends in every day life solely on there being a de facto balance of forces between the parties. It would indeed be foolish to underestimate the importance of such a balance in securing justice; but it is not the only basis thereof. The recognition of one another as persons with similar interests and capacities engaged in a common practice must, failing a special explanation, show itself in the acceptance of the principles of justice and the acknowledgment of the duty of fair play.

#### Topical fairness requirements are key to effective dialogue—monopolizing strategy and prep makes the discussion one-sided and subverts any meaningful neg role

**Galloway 7** – professor of communications at Samford University (Ryan, “Dinner And Conversation At The Argumentative Table: Reconceptualizing Debate As An Argumentative Dialogue”, Contemporary Argumentation and Debate, Vol. 28 (2007), ebsco)

Debate as a dialogue sets an argumentative table, where all parties receive a relatively fair opportunity to voice their position. Anything that fails to allow participants to have their position articulated denies one side of the argumentative table a fair hearing. The affirmative side is set by the topic and fairness requirements. While affirmative teams have recently resisted affirming the topic, in fact, the topic selection process is rigorous, taking the relative ground of each topic as its central point of departure.¶ Setting the affirmative reciprocally sets the negative. The negative crafts approaches to the topic consistent with affirmative demands. The negative crafts disadvantages, counter-plans, and critical arguments premised on the arguments that the topic allows for the affirmative team. According to fairness norms, each side sits at a relatively balanced argumentative table.¶ When one side takes more than its share, competitive equity suffers. However, it also undermines the respect due to the other involved in the dialogue. When one side excludes the other, it fundamentally denies the personhood of the other participant (Ehninger, 1970, p. 110). A pedagogy of debate as dialogue takes this respect as a fundamental component. A desire to be fair is a fundamental condition of a dialogue that takes the form of a demand for equality of voice. **Far from** being **a banal request for links** to a disadvantage, fairness is a demand for respect, a demand to be heard, a demand that a voice backed by literally months upon **months of preparation**, research, and critical thinking not be silenced.¶ Affirmative cases that suspend basic fairness norms **operate to exclude** particular negative strategies. Unprepared, one side comes to the argumentative table unable to meaningfully participate in a dialogue. They are unable to “understand what ‘went on…’” and are left to the whims of time and power (Farrell, 1985, p. 114). Hugh Duncan furthers this line of reasoning:¶ Opponents not only tolerate but honor and respect each other because in doing so they enhance their own chances of thinking better and reaching sound decisions. Opposition is necessary because it sharpens thought in action. We assume that argument, discussion, and talk, among free an informed people who subordinate decisions of any kind, because it is only through such discussion that we reach agreement which binds us to a common cause…If we are to be equal…relationships among equals must find expression in many formal and informal institutions (Duncan, 1993, p. 196-197).¶ **Debate compensates for the exigencies of the world by offering a framework that maintains equality for the sake of the conversation** (Farrell, 1985, p. 114).¶ For example, an affirmative case on the 2007-2008 college topic might defend neither state nor international action in the Middle East, and yet claim to be germane to the topic in some way. The case essentially denies the arguments that state action is oppressive or that actions in the international arena are philosophically or pragmatically suspect. Instead of allowing for the dialogue to be modified by the interchange of the affirmative case and the negative response, the affirmative subverts any meaningful role to the negative team, preventing them from offering effective “counter-word” and undermining the value of a meaningful exchange of speech acts. **Germaneness and other substitutes for topical action do not accrue the dialogical benefits** of topical advocacy.

#### Game spaces like debate are distinct from other forms of education and public speaking. There has to be a balance of ground or else one side claims the moral high ground and creates a de facto monologue

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Debate games are often based on pre-designed scenarios that include descriptions of issues to be debated, educational goals, game goals, roles, rules, time frames etc. In this way, debate games differ from textbooks and everyday classroom instruction as debate scenarios allow teachers and students to actively imagine, interact and communicate within a domain-specific game space. However, instead of mystifying debate games as a “magic circle” (Huizinga, 1950), I will try to overcome the epistemological dichotomy between “gaming” and “teaching” that tends to dominate discussions of educational games. In short, educational gaming is a form of teaching. As mentioned, education and games represent two different semiotic domains that both embody the three faces of knowledge: assertions, modes of representation and social forms of organisation (Gee, 2003; Barth, 2002; cf. chapter 2). In order to understand the interplay between these different domains and their interrelated knowledge forms, I will draw attention to a central assumption in Bakhtin’s dialogical philosophy. According to Bakhtin, all forms of communication and culture are subject to centripetal and centrifugal forces (Bakhtin, 1981). A centripetal force is the drive to impose one version of the truth, while a centrifugal force involves a range of possible truths and interpretations. This means that any form of expression involves a duality of centripetal and centrifugal forces: “Every concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear” (Bakhtin, 1981: 272). If we take teaching as an example, it is always affected by centripetal and centrifugal forces in the on-going negotiation of “truths” between teachers and students. In the words of Bakhtin: “Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction” (Bakhtin, 1984a: 110). Similarly, the dialogical space of debate games also embodies centrifugal and centripetal forces. Thus, the election scenario of The Power Game involves centripetal elements that are mainly determined by the rules and outcomes of the game, i.e. the election is based on a limited time frame and a fixed voting procedure. Similarly, the open-ended goals, roles and resources represent centrifugal elements and create virtually endless possibilities for researching, preparing, presenting, debating and evaluating a variety of key political issues. Consequently, the actual process of enacting a game scenario involves a complex negotiation between these centrifugal/centripetal forces that are inextricably linked with the teachers and students’ game activities. In this way, the enactment of The Power Game is a form of teaching that combines different pedagogical practices (i.e. group work, web quests, student presentations) and learning resources (i.e. websites, handouts, spoken language) within the interpretive frame of the election scenario. Obviously, tensions may arise if there is too much divergence between educational goals and game goals. This means that game facilitation requires a balance between focusing too narrowly on the rules or “facts” of a game (centripetal orientation) and a focusing too broadly on the contingent possibilities and interpretations of the game scenario (centrifugal orientation). For Bakhtin, the duality of centripetal/centrifugal forces often manifests itself as a dynamic between “monological” and “dialogical” forms of discourse. Bakhtin illustrates this point with the monological discourse of the Socrates/Plato dialogues in which **the teacher never learns anything new** from the students, despite Socrates’ ideological claims to the contrary (Bakhtin, 1984a). Thus, discourse becomes monologised when “someone who knows and possesses the truth **instructs someone** who is ignorant of it and in error”, where “a thought is either affirmed or repudiated” by the authority of the teacher (Bakhtin, 1984a: 81). In contrast to this, dialogical pedagogy fosters inclusive learning environments that are able to expand upon students’ existing knowledge and collaborative construction of “truths” (Dysthe, 1996). At this point, I should clarify that Bakhtin’s term “dialogic” is both a descriptive term (all utterances are per definition dialogic as they address other utterances as parts of a chain of communication) and a normative term as dialogue is an ideal to be worked for against the forces of “monologism” (Lillis, 2003: 197-8). In this project, I am mainly interested in describing the dialogical space of debate games. At the same time, I agree with Wegerif that “one of the goals of education, perhaps the most important goal, should be dialogue as an end in itself” (Wegerif, 2006: 61).

#### Policy debates require positions that upset ideologies—side switching as a model for deliberation is valuable because it’s distinct from pure discussion

**Gutmann and Thompson 1996** – \*president of Penn, former professor at Princeton, \*\* Alfred North Whitehead Professor of Political Philosophy at Harvard (Amy and Dennis, “Democracy and disagreement”, p. 1)

OF THE CHALLENGES that American democracy faces today, none is more formidable than the problem of moral disagreement. Neither the theory nor the practice of democratic politics has so far found an adequate way to cope with conflicts about fundamental values. We address the challenge of moral disagreement here by developing a conception of democracy that secures a central place for moral discussion in political life.

Along with a growing number of other political theorists, we call this conception deliberative democracy. The core idea is simple: when citizens or their representatives disagree morally, they should continue to reason together to reach mutually acceptable decisions. But the meaning and implications of the idea are complex. Although the idea has a long history, it is still in search of a theory. We do not claim that this book provides a comprehensive theory of deliberative democracy, but we do hope that it contributes toward its future development by showing the kind of delib-eration that is possible and desirable in the face of moral disagreement in democracies.

Some scholars have criticized liberal political theory for neglecting moral deliberation. Others have analyzed the philosophical foundations of deliberative democracy, and still others have begun to explore institutional reforms that would promote deliberation. Yet nearly all of them stop at the point where deliberation itself begins. None has systematically examined the substance of deliberation—the theoretical principles that should guide moral argument and their implications for actual moral disagreements about public policy. That is our subject, and it takes us into the everyday forums of democratic politics, where moral argument regularly appears but where theoretical analysis too rarely goes.

Deliberative democracy involves reasoning about politics, and nothing has been more controversial in political philosophy than the nature of reason in politics. We do not believe that these controversies have to be settled before deliberative principles can guide the practice of democracy. Since on occasion citizens and their representatives already engage in the kind of reasoning that those principles recommend, deliberative democracy simply asks that they do so more consistently and comprehensively. The best way to prove the value of this kind of reasoning is to show its role in arguments about specific principles and policies, and its contribution to actual political debates. That is also ultimately the best justification for our conception of deliberative democracy itself. But to forestall possible misunderstandings of our conception of deliberative democracy, we offer some preliminary remarks about the scope and method of this book.

The aim of the moral reasoning that our deliberative democracy pre-scribes falls between impartiality, which requires something like altruism, and prudence, which demands no more than enlightened self-interest. Its first principle is reciprocity, the subject of Chapter 2, but no less essential are the other principles developed in later chapters. When citizens reason reciprocally, they seek fair terms of social cooperation for their own sake; they try to find mutually acceptable ways of resolving moral disagreements.

The precise content of reciprocity is difficult to determine in theory, but its general countenance is familiar enough in practice. It can be seen in the difference between acting in one's self-interest (say, taking advantage of a legal loophole or a lucky break) and acting fairly (following rules in the spirit that one expects others to adopt). In many of the controversies dis-cussed later in the book, the possibility of any morally acceptable resolution depends on citizens' reasoning beyond their narrow self-interest and considering what can be justified to people who reasonably disagree with them. Even though the quality of deliberation and the conditions under which it is conducted are far from ideal in the controversies we consider, the fact that in each case some citizens and some officials make arguments consistent with reciprocity suggests that a deliberative perspective is not Utopian.

To clarify what reciprocity might demand under non-ideal conditions, we develop a distinction between deliberative and nondeliberative disa-greement. Citizens who reason reciprocally can recognize that a position is worthy of moral respect even when they think it morally wrong. They can believe that a moderate pro-life position on abortion, for example, is morally respectable even though they think it morally mistaken. (The abortion example—to which we often return in the book—is meant to be illustrative. For readers who deny that there is any room for deliberative disagreement on abortion, other political controversies can make the same point.) The presence of deliberative disagreement has important implications for how citizens treat one another and for what policies they should adopt. When a disagreement is not deliberative (for example, about a policy to legalize discrimination against blacks and women), citizens do not have any obligations of mutual respect toward their opponents. In deliberative disagreement (for example, about legalizing abortion), citizens should try to accommodate the moral convictions of their opponents to the greatest extent possible, without compromising their own moral convictions. We call this kind of accommodation an economy of moral disagreement, and believe that, though neglected in theory and practice, it is essential to a morally robust democratic life.

Although both of us have devoted some of our professional life to urging these ideas on public officials and our fellow citizens in forums of practical politics, this book is primarily the product of scholarly rather than political deliberation. Insofar as it reaches beyond the academic community, it is addressed to citizens and officials in their more reflective frame of mind. Given its academic origins, some readers may be inclined to complain that only professors could be so unrealistic as to believe that moral reasoning can help solve political problems. But such a complaint would misrepresent our aims.

To begin with, we do not think that academic discussion (whether in scholarly journals or college classrooms) is a model for moral deliberation in politics. Academic discussion need not aim at justifying a practical decision, as deliberation must. Partly for this reason, academic discussion is likely to be insensitive to the contexts of ordinary politics: the pressures of power, the problems of inequality, the demands of diversity, the exigencies of persuasion. Some critics of deliberative democracy show a similar insensitivity when they judge actual political deliberations by the standards of ideal philosophical reflection. Actual deliberation is inevitably defective, but so is philosophical reflection practiced in politics. The appropriate comparison is between the ideals of democratic deliberation and philosophical reflection, or between the application of each in the non-ideal circumstances of politics.

We do not assume that politics should be a realm where the logical syllogism rules. Nor do we expect even the more appropriate standard of mutual respect always to prevail in politics. A deliberative perspective sometimes justifies bargaining, negotiation, force, and even violence. It is partly because moral argument has so much unrealized potential in dem-ocratic politics that we believe it deserves more attention. Because its place in politics is so precarious, the need to find it a more secure home and to nourish its development is all the more pressing. Yet because it is also already part of our common experience, we have reason to hope that it can survive and even prosper if philosophers along with citizens and public officials better appreciate its value in politics.

Some readers may still wonder why deliberation should have such a prominent place in democracy. Surely, they may say, citizens should care more about the justice of public policies than the process by which they are adopted, at least so long as the process is basically fair and at least minimally democratic. One of our main aims in this book is to cast doubt on the dichotomy between policies and process that this concern assumes. Having good reason as individuals to believe that a policy is just does not mean that collectively as citizens we have sufficient justification to legislate on the basis of those reasons. The moral authority of collective judgments about policy depends in part on the moral quality of the process by which citizens collectively reach those judgments. Deliberation is the most appropriate way for citizens collectively to resolve their moral disagreements not only about policies but also about the process by which policies should be adopted. Deliberation is not only a means to an end, but also a means for deciding what means are morally required to pursue our common ends.

#### The impact outweighs—deliberative debate models impart skills vital to respond to existential threats

Christian O. **Lundberg 10** Professor of Communications @ University of North Carolina, Chapel Hill, “Tradition of Debate in North Carolina” in Navigating Opportunity: Policy Debate in the 21st Century By Allan D. Louden, p. 311

The second major problem with the critique that identifies a naivety in articulating debate and democracy is that it presumes that the primary pedagogical outcome of debate is speech capacities. But the democratic capacities built by debate are not limited to speech—as indicated earlier, debate builds capacity for critical thinking, analysis of public claims, informed decision making, and better public judgment. If the picture of modem political life that underwrites this critique of debate is a pessimistic view of increasingly labyrinthine and bureaucratic administrative politics, rapid scientific and technological change outpacing the capacities of the citizenry to comprehend them, and ever-expanding insular special-interest- and money-driven politics, it is a puzzling solution, at best, to argue that these conditions warrant giving up on debate. If democracy is open to rearticulation, it is open to rearticulation precisely because as the challenges of modern political life proliferate, the citizenry's capacities can change, which is one of the primary reasons that theorists of democracy such as Ocwey in The Public awl Its Problems place such a high premium on education (Dewey 1988,63, 154). Debate provides an indispensible form of education in the modem articulation of democracy because it builds precisely the skills that allow the citizenry to research and be informed about policy decisions that impact them, to son rhroueh and evaluate the evidence for and relative merits of arguments for and against a policy in an increasingly infonnation-rich environment, and to prioritize their time and political energies toward policies that matter the most to them.

The merits of debate as a tool for building democratic capacity-building take on a special significance in the context of information literacy. John Larkin (2005, HO) argues that one of the primary failings of modern colleges and universities is that they have not changed curriculum to match with the challenges of a new information environment. This is a problem for the course of academic study in our current context, but perhaps more important, argues Larkin, for the future of a citizenry that will need to make evaluative choices against an increasingly complex and multimediatcd information environment (ibid-). Larkin's study tested the benefits of debate participation on information-literacy skills and concluded that in-class debate participants reported significantly higher self-efficacy ratings of their ability to navigate academic search databases and to effectively search and use other Web resources:

To analyze the self-report ratings of the instructional and control group students, we first conducted a multivariate analysis of variance on all of the ratings, looking jointly at the effect of instmction/no instruction and debate topic . . . that it did not matter which topic students had been assigned . . . students in the Instnictional [debate) group were significantly more confident in their ability to access information and less likely to feel that they needed help to do so----These findings clearly indicate greater self-efficacy for online searching among students who participated in (debate).... These results constitute strong support for the effectiveness of the project on students' self-efficacy for online searching in the academic databases. There was an unintended effect, however: After doing ... the project, instructional group students also felt more confident than the other students in their ability to get good information from Yahoo and Google. It may be that the library research experience increased self-efficacy for any searching, not just in academic databases. (Larkin 2005, 144)

Larkin's study substantiates Thomas Worthcn and Gaylcn Pack's (1992, 3) claim that debate in the college classroom plays a critical role in fostering the kind of problem-solving skills demanded by the increasingly rich media and information environment of modernity. Though their essay was written in 1992 on the cusp of the eventual explosion of the Internet as a medium, Worthcn and Pack's framing of the issue was prescient: the primary question facing today's student has changed from how to best research a topic to the crucial question of learning how to best evaluate which arguments to cite and rely upon from an easily accessible and veritable cornucopia of materials.

There are, without a doubt, a number of important criticisms of employing debate as a model for democratic deliberation. But cumulatively, the evidence presented here warrants strong support for expanding debate practice in the classroom as a technology for enhancing democratic deliberative capacities. The unique combination of critical thinking skills, research and information processing skills, oral communication skills, and capacities for listening and thoughtful, open engagement with hotly contested issues argues for debate as a crucial component of a rich and vital democratic life. In-class debate practice both aids students in achieving the best goals of college and university education, and serves as an unmatched practice for creating thoughtful, engaged, open-minded and self-critical students who are open to the possibilities of meaningful political engagement and new articulations of democratic life.

Expanding this practice is crucial, if only because the more we produce citizens that can actively and effectively engage the political process, the more likely we are to produce revisions of democratic life that are necessary if democracy is not only to survive, but to thrive. Democracy faces a myriad of challenges, including: domestic and international issues of class, gender, and racial justice; wholesale environmental destruction and the potential for rapid climate change; emerging threats to international stability in the form of terrorism, intervention and new possibilities for great power conflict; and increasing challenges of rapid globalization including an increasingly volatile global economic structure. More than any specific policy or proposal, an informed and active citizenry that deliberates with greater skill and sensitivity provides one of the best hopes for responsive and effective democratic governance, and by extension, one of the last best hopes for dealing with the existential challenges to democracy [in an] increasingly complex world.

#### Deliberation is the best alternative to activism because it requires continual testing that bolsters advocacy and inclusion—refusal of side switching leads to group polarization and isolation

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two specific individuals in an article by Iris Young

Nonetheless, the deliberativist conception of reasonableness differs from the activist’s in at least one crucial respect. On the deliberativist view, a necessary condition for reasonableness is the willingness not only to offer justifications for one’s own views and actions, but also to listen to criticisms, objections, and the justificatory reasons that can be given in favor of alternative proposals.

In light of this further stipulation, we may say that, on the deliberative democrat’s view, reasonable citizens are responsive to reasons, their views are ‘reason tracking’. Reasonableness, then, entails an acknowledgement on the part of the citizen that her current views are possibly mistaken, incomplete, and in need of revision. Reasonableness is hence a two-way street: the reasonable citizen is able and willing to offer justifications for her views and actions, but is also prepared to consider alternate views, respond to criticism, answer objections, and, if necessary, revise or abandon her views. In short, reasonable citizens do not only believe and act for reasons, they aspire to believe and act according to the best reasons; consequently, they recognize their own fallibility in weighing reasons and hence engage in public deliberation in part for the sake of improving their views.15 ‘Reasonableness’ as the deliberative democrat understands it is constituted by a willingness to participate in an ongoing public discussion that inevitably involves processes of self-examination by which one at various moments rethinks and revises one’s views in light of encounters with new arguments and new considerations offered by one’s fellow deliberators. Hence Gutmann and Thompson write:

Citizens who owe one another justifications for the laws that they seek to impose must take seriously the reasons their opponents give. Taking seriously the reasons one’s opponents give means that, at least for a certain range of views that one opposes, one must acknowledge the possibility that an opposing view may be shown to be correct in the future. This acknowledgement has implications not only for the way they regard their own views. It imposes an obligation to continue to test their own views, seeking forums in which the views can be challenged, and keeping open the possibility of their revision or even rejection.16 (2000: 172)

That Young’s activist is not reasonable in this sense is clear from the ways in which he characterizes his activism. He claims that ‘Activities of protest, boycott, and disruption are more appropriate means for getting citizens to think seriously about what until then they have found normal and acceptable’ (106); activist tactics are employed for the sake of ‘bringing attention’ to injustice and making ‘a wider public aware of institutional wrongs’ (107). These characterizations suggest the presumption that questions of justice are essentially settled; the activist takes himself to know what justice is and what its implementation requires. He also believes he knows that those who oppose him are either the power-hungry beneficiaries of the unjust status quo or the inattentive and unaware masses who do not ‘think seriously’ about the injustice of the institutions that govern their lives and so unwittingly accept them. Hence his political activity is aimed exclusively at enlisting other citizens in support of the cause to which he is tenaciously committed.

The activist implicitly holds that there could be no reasoned objection to his views concerning justice, and no good reason to endorse those institutions he deems unjust. The activist presumes to know that no deliberative encounter could lead him to reconsider his position or adopt a different method of social action; he ‘declines’ to ‘engage persons he disagrees with’ (107) in discourse because he has judged on a priori grounds that all opponents are either pathetically benighted or balefully corrupt. When one holds one’s view as the only responsible or just option, there is no need for reasoning with those who disagree, and hence no need to be reasonable.

According to the deliberativist, this is the respect in which the activist is unreasonable. The deliberativist recognizes that questions of justice are difficult and complex. This is the case not only because justice is a notoriously tricky philosophical concept, but also because, even supposing we had a philosophically sound theory of justice, questions of implementation are especially thorny. Accordingly, political philosophers, social scientists, economists, and legal theorists continue to work on these questions. In light of much of this literature, it is difficult to maintain the level of epistemic confidence in one’s own views that the activist seems to muster; thus the deliberativist sees the activist’s confidence as evidence of a lack of honest engagement with the issues. A possible outcome of the kind of encounter the activist ‘declines’ (107) is the realization that the activist’s image of himself as a ‘David to the Goliath of power wielded by the state and corporate actors’ (106) is naïve. That is, the deliberativist comes to see, through processes of public deliberation, that there are often good arguments to be found on all sides of an important social issue; reasonableness hence demands that one must especially engage the reasons of those with whom one most vehemently disagrees and be ready to revise one’s own views if necessary. Insofar as the activist holds a view of justice that he is unwilling to put to the test of public criticism, he is unreasonable. Furthermore, insofar as the activist’s conception commits him to the view that there could be no rational opposition to his views, he is literally unable to be reasonable. Hence the deliberative democrat concludes that activism, as presented by Young’s activist, is an unreasonable model of political engagement.

The dialogical conception of reasonableness adopted by the deliberativist also provides a response to the activist’s reply to the charge that he is engaged in interest group or adversarial politics. Recall that the activist denied this charge on the grounds that activism is aimed not at private or individual interests, but at the universal good of justice. But this reply also misses the force of the posed objection. On the deliberativist view, the problem with interest-based politics does not derive simply from the source (self or group), scope (particular or universal), or quality (admirable or deplorable) of the interest, but with the concept of interests as such. Not unlike ‘preferences’, ‘interests’ typically function in democratic theory as fixed dispositions that are non-cognitive and hence unresponsive to reasons. Insofar as the activist sees his view of justice as ‘given’ and not open to rational scrutiny, he is engaged in the kind of adversarial politics the deliberativist rejects.

The argument thus far might appear to turn exclusively upon different conceptions of what reasonableness entails. The deliberativist view I have sketched holds that reasonableness involves some degree of what we may call epistemic modesty. On this view, the reasonable citizen seeks to have her beliefs reflect the best available reasons, and so she enters into public discourse as a way of testing her views against the objections and questions of those who disagree; hence she implicitly holds that her present view is open to reasonable critique and that others who hold opposing views may be able to offer justifications for their views that are at least as strong as her reasons for her own. Thus any mode of politics that presumes that discourse is extraneous to questions of justice and justification is unreasonable. The activist sees no reason to accept this. Reasonableness for the activist consists in the ability to act on reasons that upon due reflection seem adequate to underwrite action; discussion with those who disagree need not be involved. According to the activist, there are certain cases in which he does in fact know the truth about what justice requires and in which there is no room for reasoned objection. Under such conditions, the deliberativist’s demand for discussion can only obstruct justice; it is therefore irrational.

It may seem that we have reached an impasse. However, there is a further line of criticism that the activist must face. To the activist’s view that at least in certain situations he may reasonably decline to engage with persons he disagrees with (107), the deliberative democrat can raise the phenomenon that Cass Sunstein has called ‘group polarization’ (Sunstein, 2003; 2001a: ch. 3; 2001b: ch. 1). To explain: consider that political activists cannot eschew deliberation altogether; they often engage in rallies, demonstrations, teach-ins, workshops, and other activities in which they are called to make public the case for their views. Activists also must engage in deliberation among themselves when deciding strategy. Political movements must be organized, hence those involved must decide upon targets, methods, and tactics; they must also decide upon the content of their pamphlets and the precise messages they most wish to convey to the press. Often the audience in both of these deliberative contexts will be a self-selected and sympathetic group of like-minded activists.

Group polarization is a well-documented phenomenon that has ‘been found all over the world and in many diverse tasks’; it means that ‘members of a deliberating group predictably move towards a more extreme point in the direction indicated by the members’ predeliberation tendencies’ (Sunstein, 2003: 81–2). Importantly, in groups that ‘engage in repeated discussions’ over time, the polarization is even more pronounced (2003: 86). Hence discussion in a small but devoted activist enclave that meets regularly to strategize and protest ‘should produce a situation in which individuals hold positions more extreme than those of any individual member before the series of deliberations began’ (ibid.).17

The fact of group polarization is relevant to our discussion because the activist has proposed that he may reasonably decline to engage in discussion with those with whom he disagrees in cases in which the requirements of justice are so clear that he can be confident that he has the truth. Group polarization suggests that deliberatively confronting those with whom we disagree is essential even when we have the truth. For even if we have the truth, if we do not engage opposing views, but instead deliberate only with those with whom we agree, our view will shift progressively to a more extreme point, and thus we lose the truth. In order to avoid polarization, deliberation must take place within heterogeneous ‘argument pools’ (Sunstein, 2003: 93). This of course does not mean that there should be no groups devoted to the achievement of some common political goal; it rather suggests that engagement with those with whom one disagrees is essential to the proper pursuit of justice. Insofar as the activist denies this, he is unreasonable.

#### Their critiques of debate miss the mark—defending a topic that involves the state for the sake of deliberation is distinct from accepting it, and limiting out some arguments for the sake of that deliberation is a more productive discourse that solves the aff better

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These two serious activist challenges may be summarized as follows. First, the activist has claimed that political discussion must always take place within the context of existing institutions that due to structural inequality grant to certain individuals the power to set discussion agendas and constrain the kinds of options open for consideration prior to any actual encounter with their deliberative opponents; the deliberative process is in this sense rigged from the start to favor the status quo and disadvantage the agents of change. Second, the activist has argued that political discussion must always take place by means of antecedent ‘discourses’ or vocabularies which establish the conceptual boundaries of the deliberation and hence may themselves be hegemonic or systematically distorting; the deliberative process is hence subject to the distorting influence of ideology at the most fundamental level, and deliberative democrats do not have the resources by which such distortions can be addressed. As they aim to establish that the deliberativist’s program is inconsistent with her own democratic objectives, this pair of charges is, as Young claims, serious (118). However, I contend that the deliberativist has adequate replies to them both.

Part of the response to the first challenge is offered by Young herself. The deliberative democrat does not advocate public political discussion only at the level of state policy, and so does not advocate a program that must accept as given existing institutional settings and contexts for public discussion. Rather, the deliberativist promotes an ideal of democratic politics according to which deliberation occurs at all levels of social association, including households, neighborhoods, local organizations, city boards, and the various institutions of civil society. The longrun aim of the deliberative democrat is to cultivate a more deliberative polity, and the deliberativist claims that this task must begin at more local levels and apart from the state and its policies. We may say that deliberativism promotes a ‘decentered’ (Habermas, 1996: 298) view of public deliberation and a ‘pluralistic’ (Benhabib, 2002: 138) model of the public sphere; in other words, the deliberative democrat envisions a ‘multiple, anonymous, heterogeneous network of many publics and public conversations’ (Benhabib, 1996b: 87). The deliberativist is therefore committed to the creation of ‘an inclusive deliberative setting in which basic social and economic structures can be examined’; these settings ‘for the most part must be outside ongoing settings of official policy discussion’ (115).

Although Young characterizes this decentered view of political discourse as requiring that deliberative democrats ‘withdraw’ (115) from ‘existing structural circumstances’ (118), it is unclear that this follows. There certainly is no reason why the deliberativist must choose between engaging arguments within existing deliberative sites and creating new ones that are removed from established institutions. There is no need to accept Young’s dichotomy; the deliberativist holds that work must be done both within existing structures and within new contexts. As Bohman argues,

Deliberative politics has no single domain; it includes such diverse activities as formulating and achieving collective goals, making policy decisions and means and ends, resolving conflicts of interest and principle, and solving problems as they emerge in ongoing social life. Public deliberation therefore has to take many forms. (1996: 53)

The second challenge requires a detailed response, so let us begin with a closer look at the proposed argument. The activist has moved quickly from the claim that discourses can be systematically distorting to the claim that all political discourse operative in our current contexts is systematically distorting. The conclusion is that properly democratic objectives cannot be pursued by deliberative means. The first thing to note is that, as it stands, the conclusion does not follow from the premises; the argument is enthymematic. What is required is the additional premise that the distorting features of discussion cannot be corrected by further discussion. That discussion cannot rehabilitate itself is a crucial principle in the activist’s case, but is nowhere argued.

Moreover, the activist has given no arguments to support the claim that present modes of discussion are distorting, and has offered no analysis of how one might detect such distortions and discern their nature.20 Rather than providing a detailed analysis of the phenomenon of systematic distortion, Young provides (in her own voice) two examples of discourses that she claims are hegemonic. First she considers discussions of poverty that presume the adequacy of labor market analyses; second she cites discussions of pollution that presume that modern economies must be based on the burning of fossil-fuels. In neither case does she make explicit what constitutes the distortion. At most, her examples show that some debates are framed in ways that render certain types of proposals ‘out of bounds’. But surely this is the case in any discussion, and it is not clear that it is in itself always a bad thing or even ‘distorting’. Not all discursive exclusions are distortions because the term ‘distortion’ implies that something is being excluded that should be included.

Clearly, then, there are some dialectical exclusions that are entirely appropriate. For example, it is a good thing that current discussions of poverty are often cast in terms that render white supremacist ‘solutions’ out of bounds; it is also good that pollution discourses tend to exclude fringe-religious appeals to the cleansing power of mass prayer. This is not to say that opponents of market analyses of poverty are on par with white supremacists or that Greens are comparable to fringe-religious fanatics; it is rather to press for a deeper analysis of the discursive hegemony that the activist claims undermines deliberative democracy. It is not clear that the requested analysis, were it provided, would support the claim that systematic distortions cannot be addressed and remedied within the processes of continuing discourse. There are good reasons to think that continued discussion among persons who are aware of the potentially hegemonic features of discourse can correct the distorting factors that exist and block the generation of new distortions.

As Young notes (116), James Bohman (1996: ch. 3) has proposed a model of deliberation that incorporates concerns about distorted communication and other forms of deliberative inequality within a general theory of deliberative democracy; the recent work of Seyla Benhabib (2002) and Robert Goodin (2003: chs 9–11) aims for similar goals. Hence I conclude that, as it stands, the activist’s second argument is incomplete, and as such the force of the difficulty it raises for deliberative democracy is not yet clear. If the objection is to stick, the activist must first provide a more detailed examination of the hegemonic and distorting properties of discourse; he must then show both that prominent modes of discussion operative in our democracy are distorting in important ways and that further discourse cannot remedy these distortions.

#### Ideology is only shaken by agonistic spaces with arguments subject to testing and reconsideration on both sides—this is key to make competition productive

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Totalitarianism and the Competitive Space of Agonism

Arendt is probably most famous for her analysis of totalitarianism (especially her The Origins of Totalitarianism and Eichmann in Jerusalem), but the recent attention has been on her criticism of mass culture (The Human Condition). Arendt's main criticism of the current human condition is that the common world of deliberate and joint action is fragmented into solipsistic and unreflective behavior. In an especially lovely passage, she says that in mass society people are all **imprisoned in the subjectivity of their own singular experience**, which does not cease to be singular if the same experience is multiplied innumerable times. The end of the common world has come when it is seen only under one aspect and is permitted to present itself in only one perspective. (Human 58)

What Arendt so beautifully describes is that isolation and individualism are not corollaries, and may even be antithetical because obsession with one's own self and the particularities of one's life prevents one from engaging in conscious, deliberate, collective action. Individuality, unlike isolation, depends upon a collective with whom one argues in order to direct the common life. Self-obsession, even (especially?) when coupled with isolation from one' s community is far from apolitical; it has political consequences. Perhaps a better way to put it is that it is political precisely because it aspires to be apolitical. This fragmented world in which many people live simultaneously and even similarly but not exactly together is what Arendt calls the "social."

Arendt does not mean that group behavior is impossible in the realm of the social, but that social behavior consists "in some way of isolated individuals, incapable of solidarity or mutuality, who abdicate their human capacities and responsibilities to a projected 'they' or 'it,' with disastrous consequences, both for other people and eventually for themselves" (Pitkin 79). One can behave, but not act. For someone like Arendt, a German-assimilated Jew, one of the most frightening aspects of the Holocaust was the ease with which a people who had not been extraordinarily anti-Semitic could be put to work industriously and efficiently on the genocide of the Jews. And what was striking about the perpetrators of the genocide, ranging from minor functionaries who facilitated the murder transports up to major figures on trial at Nuremberg, was their constant and apparently sincere insistence that they were not responsible. For Arendt, this was not a peculiarity of the German people, but of the current human and heavily bureaucratic condition of twentieth-century culture: we do not consciously choose to engage in life's activities; we drift into them, or we do them out of a desire to conform. Even while we do them, we do not acknowledge an active, willed choice to do them; instead, we attribute our behavior to necessity, and we perceive ourselves as determined—determined by circumstance, by accident, by what "they" tell us to do. We do something from within the anonymity of a mob that we would never do as an individual; we do things for which we will not take responsibility. Yet, whether or not people acknowledge responsibility for the consequences of their actions, those consequences exist. Refusing to accept responsibility can even make those consequences worse, in that the people who enact the actions in question, because they do not admit their own agency, cannot be persuaded to stop those actions. They are simply doing their jobs. In a totalitarian system, however, everyone is simply doing his or her job; there never seems to be anyone who can explain, defend, and change the policies. Thus, it is, as Arendt says, rule by nobody.

It is illustrative to contrast Arendt's attitude toward discourse to Habermas'. While both are critical of modern bureaucratic and totalitarian systems, Arendt's solution is the playful and **competitive space** of agonism; it is not the rational-critical public sphere. The "actual content of political life" is "the joy and the gratification that arise out of being in company with our peers, out of acting together and appearing in public, out of inserting ourselves into the world by word and deed, thus acquiring and sustaining our personal identity and beginning something entirely new" ("Truth" 263). According to Seyla Benhabib, Arendt's public realm emphasizes the assumption of competition, and it "represents that space of appearances in which moral and political greatness, heroism, and preeminence are revealed, displayed, shared with others. This is a competitive space in which one competes for recognition, precedence, and acclaim" (78). These qualities are displayed, but not entirely for purposes of acclamation; they are not displays of one's self, but of ideas and arguments, of one's thought. When Arendt discusses Socrates' thinking in public, she emphasizes his performance: "He performed in the marketplace the way the flute-player performed at a banquet. It is sheer performance, sheer activity"; nevertheless, it was thinking: "What he actually did was to make public, in discourse, the thinking process" {Lectures 37). Pitkin summarizes this point: "Arendt says that the heroism associated with politics is not the mythical machismo of ancient Greece but something more like the existential leap into action and public exposure" (175-76). Just as it is not machismo, although it does have considerable ego involved, so it is not instrumental rationality; Arendt's discussion of the kinds of discourse involved in public action include myths, stories, and personal narratives.

Furthermore, the competition is not ruthless; it does not imply a willingness to triumph at all costs. Instead, it involves something like having such a passion forideas and politics that one is willing to take risks. One tries to articulate the best argument, propose the best policy, design the best laws, make the best response. This is a risk in that one might lose; advancing an argument means that one must be **open to the criticisms** others will make of it. The situation is agonistic not because the participants manufacture or seek conflict, but because **conflict is a necessary consequence of difference**. This attitude is reminiscent of Kenneth Burke, who did not try to find a language free of domination but who instead theorized a way that the very tendency toward hierarchy in language might be used against itself (for more on this argument, see Kastely). Similarly, Arendt does **not** propose **a** public **realm of neutral**, rational **beings** who escape differences to live in the discourse of universals; she envisions one of different people who argue with passion, vehemence, and integrity.

Continued…

Eichmann perfectly exemplified what Arendt famously called the "banality of evil" but that might be better thought of as the bureaucratization of evil (or, as a friend once aptly put it, the evil of banality). That is, he was able to engage in mass murder because he was able not to think about it, especially not from the perspective of the victims, and he was able to exempt himself from personal responsibility by telling himself (and anyone else who would listen) that he was just following orders. It was the bureaucratic system that enabled him to do both. He was not exactly passive; he was, on the contrary, very aggressive in trying to do his duty. He behaved with the "ruthless, competitive exploitation" and "inauthen-tic, self-disparaging conformism" that characterizes those who people totalitarian systems(Pitkin 87).

Arendt's theorizing of totalitarianism has been justly noted as one of her strongest contributions to philosophy. She saw that a situation like Nazi Germany is different from the conventional understanding of a tyranny. Pitkin writes,

Totalitarianism cannot be understood, like earlier forms of domination, as the ruthless exploitation of some people by others, whether the motive be selfish calculation, irrational passion, or devotion to some cause. Understanding totalitarianism's essential nature requires solving the central mystery of the holocaust—the objectively useless and indeed dysfunctional, fanatical pursuit of a purely ideological policy, a pointless process to which the people enacting it have fallen captive. (87)

Totalitarianism is closely connected to bureaucracy; it is oppression by rules, rather than by people who have willfully chosen to establish certain rules. It is the triumph of the social.

Critics (both friendly and hostile) have paid considerable attention to Arendt's category of the "social," largely because, despite spending so much time on the notion, Arendt remains vague on certain aspects of it. Pitkin appropriately compares Arendt's concept of the social to the Blob, the type of monster that figured in so many post-war horror movies. That Blob was "an evil monster from outer space, entirely external to and separate from us [that] had fallen upon us intent on debilitating, absorbing, and ultimately destroying us, gobbling up our distinct individuality and turning us into robots that mechanically serve its purposes" (4).

Pitkin is critical of this version of the "social" and suggests that Arendt meant (or perhaps should have meant) something much more complicated. The simplistic version of the social-as-Blob can itself be an instance of Blob thinking; Pitkin's criticism is that Arendt talks at times as though the social comes from outside of us and has fallen upon us, turning us into robots. Yet, Arendt's major criticism of the social is that it involves seeing ourselves as victimized by something that comes from outside our own behavior. I agree with Pitkin that Arendt's most powerful descriptions of the social (and the other concepts similar to it, such as her discussion of totalitarianism, imperialism, Eichmann, and parvenus) emphasize that these processes are not entirely out of our control but that they happen to us when, and because, we keep refusing to make active choices. We create the social through negligence. It is not the sort of force in a Sorcerer's Apprentice, which once let loose cannot be stopped; on the contrary, it continues to exist because we structure our world to reward social behavior. Pitkin writes, "From childhood on, in virtually all our institutions, we reward euphemism, salesmanship, slogans, and we punish and suppress truth-telling, originality, thoughtful-ness. So we continually cultivate ways of (not) thinking that induce the social" (274). I want to emphasize this point, as it is important for thinking about criticisms of some forms of the social construction of knowledge: denying our own agency is what enables the social to thrive. To put it another way, theories of powerlessness are self-fulfilling prophecies.

Arendt grants that there are people who willed the Holocaust, but she insists that totalitarian systems result not so much from the Hitlers or Stalins as from the bureaucrats who may or may not agree with the established ideology but who enforce the rules for no stronger motive than a desire to avoid trouble with their superiors (see Eichmann and Life). They do not think about what they do. One might prevent such occurrences—or, at least, resist the modern tendency toward totalitarianism—by thought: "critical thought is in principle anti-authoritarian" (Lectures 38).

By "thought" Arendt does not mean eremitic contemplation; in fact, she has great contempt for what she calls "professional thinkers," refusing herself to become a philosopher or to call her work philosophy. Young-Bruehl, Benhabib, and Pitkin have each said that Heidegger represented just such a professional thinker for Arendt, and his embrace of Nazism epitomized the genuine dangers such "thinking" can pose (see Arendt's "Heidegger"). "Thinking" is not typified by the isolated contemplation of philosophers; it requires the **arguments of others** and close attention to the truth. It is easy to overstate either part of that harmony. One must consider carefully the arguments and viewpoints of others:

Political thought is representative. I form an opinion by considering a given issue from different viewpoints, by making present to my mind the standpoints of those who are absent; that is, I represent them. This process of representation does not blindly adopt the actual views of those who stand somewhere else, and hence look upon the world from a different perspective; this is a question neither of empathy, as though I tried to be or to feel like somebody else, nor of counting noses and joining a majority but of being and thinking in my own identity where actually I am not. The more people's standpoints I have present in my mind while I am pondering a given issue, and the better I can imagine how I would feel and think if I were in their place, the stronger will be my capacity for representative thinking and the more valid my final conclusions, my opinion. ("Truth" 241)

There are two points to emphasize in this wonderful passage. First, one does not get these standpoints in one's mind through imagining them, but through listening to them; thus, good thinking requires that one hear the arguments of other people. Hence, as Arendt says, "critical thinking, while still a solitary business, does not cut itself off from' all others.'" Thinking is, in this view, necessarily public discourse: critical thinking is possible "only where the standpoints of all others are open to inspection" (Lectures 43). Yet, it is not a discourse in which one simply announces one's stance; participants are interlocutors and not just speakers; they must listen. Unlike many current versions of public discourse, this view presumes that speech matters. It is not asymmetric manipulation of others, nor merely an economic exchange; it must be a world into which one enters and by which one might be changed.

Second, passages like the above make some readers think that Arendt puts too much faith in discourse and too little in truth (see Habermas). But Arendt is no crude relativist; she believes in truth, and she believes that there are facts that can be more or less distorted. She does not believe that reality is constructed by discourse, or that truth is indistinguishable from falsehood. She insists that the truth has a different pull on us and, consequently, that it has a difficult place in the world of the political. Facts are different from falsehood because, while they can be distorted or denied, especially when they are inconvenient for the powerful, they also have a certain positive force that falsehood lacks: "Truth, though powerless and always defeated in a head-on clash with the powers that be, possesses a strength of its own: whatever those in power may contrive, they are unable to discover or invent a viable substitute for it. Persuasion and violence can destroy truth, but they cannot replace it" ("Truth" 259).

Facts have a strangely resilient quality partially because a lie "tears, as it were, a hole in the fabric of factuality. As every historian knows, one can spot a lie by noticing incongruities, holes, or the junctures of patched-up places" ("Truth" 253). While she is sometimes discouraging about our ability to see the tears in the fabric, citing the capacity of totalitarian governments to create the whole cloth (see "Truth" 252-54), she is also sometimes optimistic. In Eichmann in Jerusalem, she repeats the story of Anton Schmidt—a man who saved the lives of Jews—and concludes that such stories cannot be silenced (230-32). For facts to exert power in the common world, however, these stories must be told. Rational truth (such as principles of mathematics) might be perceptible and demonstrable through individual contemplation, but "factual truth, on the contrary, is always related to other people: it concerns events and circumstances in which many are involved; it is established by witnesses and depends upon testimony; it exists only to the extent that it is spoken about, even if it occurs in the domain of privacy. It is political by nature" (23 8). Arendt is neither a positivist who posits an autonomous individual who can correctly perceive truth, nor a relativist who positively asserts the inherent relativism of all perception. Her description of how truth functions does not fall anywhere in the three-part expeditio so prevalent in bothrhetoric and philosophy: it is not expressivist, positivist, or social constructivist. Good thinking depends upon good public argument, and good public argument depends upon access to facts: "Freedom of opinion is a farce unless factual information is guaranteed" (238).

The sort of thinking that Arendt propounds takes the form of action only when it is public argument, and, as such, it is particularly precious: "For if no other test but the experience of being active, no other measure but the extent of sheer activity were to be applied to the various activities within the vita activa, it might well be that thinking as such would surpass them all" (Human 325). Arendt insists that it is "the same general rule— Do not contradict yourself (not your self but your thinking ego)—that determines both thinking and acting" (Lectures 3 7). In place of the mildly resentful conformism that fuels totalitarianism, Arendt proposes what Pitkin calls "a tough-minded, open-eyed readiness to perceive and judge reality for oneself, in terms of concrete experience and independent, critical theorizing" (274). The paradoxical nature of agonism (that it must involve both individuality and commonality) makes it difficult to maintain, as the temptation is great either to think one's own thoughts without reference to anyone else or to let others do one's thinking.

Arendt's Polemical Agonism

As I said, agonism does have its advocates within rhetoric—Burke, Ong, Sloane, Gage, and Jarratt, for instance—but while each of these theorists proposes a form of conflictual argument, not one of these is as adversarial as Arendt's. Agonism can emphasize persuasion, as does John Gage's textbook The Shape of Reason or William Brandt et al.'s The Craft of Writing. That is, the goal of the argument is to identify the disagreement and then construct a text that gains the assent of the audience. This is not the same as what Gage (citing Thomas Conley) calls "asymmetrical theories of rhetoric": theories that "presuppose an active speaker and a passive audience, a speaker whose rhetorical task is therefore to do something to that audience" ("Reasoned" 6). Asymmetric rhetoric is not and cannot be agonistic. Persuasive agonism still values conflict, disagreement, and equality among interlocutors, but it has the goal of reaching agreement, as when Gage says that the process of argument should enable one's reasons to be "understood and believed" by others (Shape 5; emphasis added).

Arendt's version is what one might call polemical agonism: it puts less emphasis on gaining assent, and it is exemplified both in Arendt's own writing and in Donald Lazere's "Ground Rules for Polemicists" and "Teaching the Political Conflicts." Both forms of agonism (persuasive and polemical) require substantive debate at two points in a long and recursive process. First, one engages in debate in order to invent one's argument; even silent thinking is a "dialogue of myself with myself (Lectures 40). The difference between the two approaches to agonism is clearest when one presents an argument to an audience assumed to be an opposition. In persuasive agonism, one plays down conflict and moves through reasons to try to persuade one's audience. In polemical agonism, however, one's intention is not necessarily to prove one's case, but to make public one' s thought in order to test it. In this way, communicability serves the same function in philosophy that replicability serves in the sciences; it is how one tests the validity of one's thought. In persuasive agonism, success is achieved through persuasion; in polemical agonism, success may be marked through the quality of subsequent controversy.

Arendt quotes from a letter Kant wrote on this point:

You know that I do not approach reasonable objections with the intention merely of refuting them, but that in thinking them over I always weave them into my judgments, and afford them the opportunity of overturning all my most cherished beliefs. I entertain the hope that by thus viewing my judgments impartially from the standpoint of others some third view that will improve upon my previous insight may be obtainable. {Lectures 42)

Kant's use of "impartial" here is interesting: he is not describing a stance that is free of all perspective; it is impartial only in the sense that it is not his own view. This is the same way that Arendt uses the term; she does not advocate any kind of positivistic rationality, but instead a "universal interdependence" ("Truth" 242). She does not place the origin of the "disinterested pursuit of truth" in science, but at "the moment when Homer chose to sing the deeds of the Trojans no less than those of the Achaeans, and to praise the glory of Hector, the foe and the defeated man, no less than the glory of Achilles, the hero of his kinfolk" ("Truth" 26263). It is useful to note that Arendt tends not to use the term "universal," opting more often for "common," by which she means both what is shared and what is ordinary, a usage that evades many of the problems associated with universalism while preserving its virtues (for a brief but provocative application of Arendt's notion of common, see Hauser 100-03).

In polemical agonism, there is a sense in which one' s main goal is not to persuade one's readers; persuading one's readers, if this means that they fail to see errors and flaws in one' s argument, might actually be a sort of failure. It means that one wishes to put forward an argument that makes clear what one's stance is and why one holds it, but with the intention of provoking critique and counterargument. Arendt describes Kant's "hope" for his writings not that the number of people who agree with him would increase but "that the circle of his examiners would gradually be enlarged" {Lectures 39); he wanted interlocutors, not acolytes.

**This is not consensus-based argument**, nor is it what is sometimes called "consociational argument," nor is this argument as mediation or conflict resolution. Arendt (and her commentators) use the term "fight," and they mean it. When Arendt describes the values that are necessary in our world, she says, "They are a sense of honor, desire for fame and glory, the spirit of fighting without hatred and 'without the spirit of revenge,' and indifference to material advantages" {Crises 167). Pitkin summarizes Arendt's argument: "Free citizenship presupposes the ability to fight— openly, seriously, with commitment, and about things that really matter—without fanaticism, without seeking to exterminate one's opponents" (266). My point here is two-fold: first, there is not a simple binary opposition between persuasive discourse and eristic discourse, the conflictual versus the collaborative, or argument as opposed to debate.

Second, while polemical agonism requires diversity among interlocutors, and thus seems an extraordinarily appropriate notion, and while it may be a useful corrective to too much emphasis on persuasion, it seems to me that polemical agonism could easily slide into the kind of wrangling that is simply frustrating. Arendt does not describe just how one is to keep the conflict useful. Although she rejects the notion that politics is "no more than a battlefield of partial, conflicting interests, where nothing countfs] but pleasure and profit, partisanship, and the lust for dominion," she does not say exactly how we are to know when we are engaging in the existential leap of argument versus when we are lusting for dominion ("Truth" 263).

Like other proponents of agonism, Arendt argues that rhetoric does not lead individuals or communities to **ultimate Truth**; it leads to decisions that will necessarily have to be reconsidered. Even Arendt, who tends to express a greater faith than many agonists (such as Burke, Sloane, or Kastely) in the ability of individuals to perceive truth, insists that self-deception is always a danger, so public **discourse is necessary as a form of testing** (see especially Lectures and "Truth"). She remarks that it is difficult to think beyond one's self-interest and that "nothing, indeed, is more common, even among highly sophisticated people, than the blind obstinacy that becomes manifest in lack of imagination and failure to judge" ("Truth" 242).

Agonism demands that one simultaneously trust and **doubt one' s own perceptions**, rely on one's own judgment and consider the judgments of others, think for oneself and imagine how others think. The question remains whether this is a kind of thought in which everyone can engage. Is the agonistic public sphere (whether political, academic, or scientific) only available to the few? Benhabib puts this criticism in the form of a question: "That is, is the 'recovery of the public space' under conditions of modernity necessarily an elitist and antidemocratic project that can hardly be reconciled with the demand for universal political emancipation and the universal extension of citizenship rights that have accompanied modernity since the American and French Revolutions?" (75). This is an especially troubling question not only because Arendt's examples of agonistic rhetoric are from elitist cultures, but also because of comments she makes, such as this one from The Human Condition: "As a living experience, thought has always been assumed, perhaps wrongly, to be known only to the few. It may not be presumptuous to believe that these few have not become fewer in our time" {Human 324).

Yet, there are important positive political consequences of agonism.

Arendt' s own promotion of the agonistic sphere helps to explain how the system could be actively moral. It is not an overstatement to say that a central theme in Arendt's work is the evil of conformity—the fact that the modern bureaucratic state makes possible extraordinary evil carried out by people who do not even have any ill will toward their victims. It does so by "imposing innumerable and various rules, all of which tend to 'normalize' its members, to make them behave, to exclude spontaneous action or outstanding achievement" (Human 40). It keeps people from thinking, and it keeps them behaving. The agonistic model's celebration of achievement and verbal skill undermines the political force of conformity, so it is a force against the bureaucratizing of evil. If people think for themselves, they will resist dogma; if people think of themselves as one of many, they will empathize; if people can do both, they will resist totalitarianism. And if they talk about what they see, tell their stories, argue about their perceptions, and listen to one another—that is, engage in rhetoric—then they are engaging in antitotalitarian action.

In post-Ramistic rhetoric, it is a convention to have a thesis, and one might well wonder just what mine is—whether I am arguing for or against Arendt's agonism. Arendt does not lay out a pedagogy for us to follow (although one might argue that, if she had, it would lookmuch like the one Lazere describes in "Teaching"), so I am not claiming that greater attention to Arendt would untangle various pedagogical problems that teachers of writing face. Nor am I claiming that applying Arendt's views will resolve theoretical arguments that occupy scholarly journals. I am saying, on the one hand, that Arendt's connection of argument and thinking, as well as her perception that both serve to thwart totalitarianism, suggest that **agonal rhetoric (despite the current preference for collaborative rhetoric) is the best discourse for a diverse and inclusive public sphere**. On the other hand, Arendt's advocacy of agonal rhetoric is troubling (and, given her own admiration for Kant, this may be intentional), especially in regard to its potential elitism, masculinism, failure to describe just how to keep argument from collapsing into wrangling, and apparently cheerful acceptance of hierarchy. Even with these flaws, Arendt describes something we would do well to consider thoughtfully: a fact-based but not positivist, communally grounded but not relativist, adversarial but not violent, independent but not expressivist rhetoric.

#### Limits are key to activate agency with agonism—it’s not a constraint on perspective but a way to channel difference toward effective contest

**Glover 2010** – professor of political science at U Conn (Robert, Philosophy and Social Criticism, 36, “Games without Frontiers?: Democratic Engagement, Agonistic Pluralism, and the Question of Exclusion”)

Recent democratic theory has devoted significant attention to the question of how to revitalize citizen engagement and reshape citizen involvement within the process of collective political decision-making and self-government. Yet these theorists do so with the sober recognition that more robust democratic engagement may provide new means for domination, exploitation- intensification of disagreement, or even the introduction of fanaticism into our public debates.1 Thus, numerous proposals have attempted to define the **acceptable boundaries** of our day-to-day democratic discourse and establish regulative ideals whereby we restrict the **types of justifications** that can be employed in democratic argumentation. This subtle form of exclusion delineates which forms of democratic discourse are deemed to be legitimate—worthy of consideration in the larger democratic community, and morally justifiable as a basis for policy. As an outgrowth of these concerns, this newfound emphasis on political legitimacy has provoked a flurry of scholarly analysis and debate."

Different theorists promote divergent conceptions of what ought to count as acceptable and legitimate forms of democratic engagement, and promote more or less stringent normative conceptions of the grounds for exclusion and de-legitimization. One of the most novel approaches to this question is offered by agonistic pluralism, a strain of democratic theory advanced by political theorists such as William Connolly, Bonnie Honig, Ernesto Laclau, Chantal Mouffe, and James Tully. Agonistic pluralism, or simply agonism, is a theory of democracy rooted in the ancient Greek notion of the agon, a public struggle or contest between adversaries. While recognizing **the necessity of** placing **restrictions** upon democratic discourse, agonistic pluralists also call upon us to guard against the naturalization of such exclusion and the coercive act of power which it implies. Rather, we must treat these actions as contingent, subject to further scrutiny, critique, and re-articulation in contentious and widely inclusive democratic spaces.

In so doing, agonistic pluralism offers us a novel means of approaching democratic discourse, receptive to the claims of new actors and identities while also recognizing that there must be some, albeit minimal, restrictions placed on the form that such democratic engagement takes. In short, the goal of agonists is **not to 'eradicate** the use of **power in social relations but to acknowledge its ineradicable nature** and attempt to modify power in ways that are compatible with democratic values'.5 This is democracy absent the 'final guarantee\* or the 'definitive legitimation.'4 As one recent commentator succinctly put it, agonistic pluralism forces democratic actors to '...relinquish all claims to finality, to happy endings../.5

Yet while agonistic pluralism offers valuable insights regarding how we might reshape and revitalize the character of our democratic communities, it is a much more diverse intellectual project than is commonly acknowledged. There are no doubt continuities among these thinkers, yet those engaged in agonistic pluralism ultimately operate with divergent fundamental assumptions, see different processes at work in contemporary democratic politics, and aspire towards unique political end-goals. To the extent that we do not recognize these different variants, we risk failing to adequately consider proposals which could positively alter the character of our democratic engagement, enabling us to reframe contemporary pluralism as a positive avenue for social change and inclusion rather than a crisis to be contained.

This piece begins by outlining agonistic pluralism's place within the larger theoretical project of revitalizing democratic practice, centered on the theme of what constitutes 'legitimate" democratic discourse. Specifically, I focus on agonism's place in relation to 'participatory' and 'deliberative' strains of democratic theory. I then highlight the under-examined diversity of those theorists commonly captured under the heading of agonistic pluralism, drawing upon Chantal Mouffe\*s recent distinction between 'dissociative' and 'associative' agonism. However, I depart from her assertion that 'associative agonists' such as Bonnie Honig and William Connolly offer us no means by which to engage in the 'negative determination of frontiers\* of our political spaces. Contra Mouffe, **I defend these theorists as offer**ing **the most valuable formulation** of agonism, due to their articulation of the civic virtues and democratic (re)education needed to foster greater inclusivity and openness, while retaining the recognition that democratic **discourse must operate with limits** and frontiers.

### 2nc

#### Duffy is wrong

**Koehle 10**

Joe Koehle, Phd candidate in communications at Kansas, former West Georgia debater

http://mccfblog.org/actr/wp-content/uploads/2010/12/Koehle\_Paper\_ACTR-editedPDF.pdf.

Much like criticism of the sophists has persisted throughout time; criticism of switch side debate has been a constant feature since the advent of tournament-style debating. Harrigan documents how numerous these criticisms have been in the last century, explaining that Page 15 Koehle 15 complaints about the mode of debate are as old as the activity itself (9). The most famous controversy over modern switch side debate occurred in 1954, when the U.S. military academies and the Nebraska teachers‟ colleges decided to boycott the resolution: “Resolved: That the United States should extend diplomatic relations to the communist government of China.” The schools that boycotted the topic argued that it was ethically and educationally indefensible to defend a recognition of communists, and even went so far as to argue that “a pro-recognition stand by men wearing the country‟s uniforms would lead to misunderstanding on the part of our friends and to distortion by our enemies” (English et al. 221). Switch side debate was on the defensive, and debate coaches of the time were engaged in virulent debate over the how to debate. The controversy made the national news when the journalist Edward Murrow became involved and opined on the issue in front of millions of TV viewers. English et al. even go so far as to credit the “debate about debate” with helping accelerate the implosion of the famous red- baiting Senator Joseph McCarthy (222). The debate about debate fell back out of the national spotlight after the high-profile incident over the China resolution, but it never ended in the debate community itself. The tenor of the debate reached a fever pitch when outright accusations of modern sophistry (the bad kind) were published in the Spring 1983 edition of the National Forensic Journal, when Bernard K. Duffy wrote, “The Ethics of Argumentation in Intercollegiate Debate: A Conservative Appraisal.” Echoing the old Platonic argument against sophistic practice, Duffy argued that switch side debate has ignored ethical considerations in the pursuit of teaching cheap techniques for victory (66). The 1990‟s saw a divergence of criticisms into two different camps. The first camp was comprised of traditional critics who argued that debate instruction and practice promoted form over substance. For example, a coach from Boston College lamented that absent a change, “Debate instructors and their students will become the sophists of our age, susceptible to the traditional indictments elucidated by Isocrates and others” (Herbeck). Dale Bertelstein published a response to the previously cited article by Muir about switch side debate that launched into an extended discussion of debate and sophistry. This article continued the practice of coaches and communications scholars developing and applying the Platonic critique of the sophists to contemporary debate practices. Alongside this traditional criticism a newer set of critiques of switch side debate emerged. Armed with the language of Foucauldian criticism, Critical Legal Studies, and critiques of normativity and statism, many people who were uncomfortable with the debate tradition of arguing in favor of government action began to question the reason why one should ever be obliged to advocate government action. They began to argue that switch side debate was a mode of debate that unnecessarily constrained people to the hegemony of debating the given topic. These newer criticisms of switch side debate gained even more traction after the year 2000, with several skilled teams using these arguments to avoid having to debate one side of the topic. William Spanos, a professor of English at SUNY Binghamton decided to link the ethos of switch side debate to that of neo-conservatism after observing a debate tournament, saying that “the arrogant neocons who now saturate the government of the Bush…learned their „disinterested‟ argumentative skills in the high school and college debate societies and that, accordingly, they have become masters at disarming the just causes of the oppressed.” (Spanos 467) Contemporary policy debate is now under attack from all sides, caught in its own dissoi logoi. Given the variety of assaults upon switch side debate by both sides of the political spectrum, how can switch side debate be justified? Supporters of switch side debate have made many arguments justifying the value of the practice that are not related to any defense of sophist Page 17 Koehle 17 techniques. I will only briefly describe them so as to not muddle the issue, but they are worthy of at least a cursory mention. The first defense is the most pragmatic reason of all: Mandating people debate both sides of a topic is most fair to participants because it helps mitigate the potential for a topic that is biased towards one side. More theoretical justifications are given, however. Supporters of switch side debate have argued that encouraging students to play the devil‟s advocate creates a sense of self-reflexivity that is crucial to promoting tolerance and preventing dogmatism (Muir 287). Others have attempted to justify switch side debate in educational terms and advocacy terms, explaining that it is a path to diversifying a student‟s knowledge by encouraging them to seek out paths they may have avoided otherwise, which in turn creates better public advocates (Dybvig and Iversen). In fact, contemporary policy debate and its reliance upon switching sides creates an oasis of argumentation free from the demands of advocacy, allowing students to test out ideas and become more well-rounded advocates as they leave the classroom and enter the polis (Coverstone). Finally, debate empowers individuals to become critical thinkers capable of making sound decisions (Mitchell, “Pedagogical Possibilities”, 41).

#### Moral purism about institutional approaches dooms the aff—hierarchy should be deployed tactically for greater overall gains

**Grossberg, 92** [Lawrence, Morris Davis Professor of Communication Studies at the University of North Carolina at Chapel Hill, “We Gotta Get Out of this Place: Popular Conservatism and Postmodern Culture”, page 388-389 //liam ]

﻿The demand for moral and ideological purity often results in the rejection of any hierarchy or organization. The question-can the master's tools be used to tear down the master's house?-ignores both the contingency of the relation between such tools and the master's power and, even more importantly, the fact that there may be no other tools available. Institutionalization is seen as a repressive impurity within the body politic rather than as a strategic and **tactical**, even empowering, necessity. It sometimes seems as if every progressive organization is condemned to recapitulate the same arguments and crisis, often leading to their collapse. 54 For example, Minkowitz has described a crisis in Act Up over the need for efficiency and organization, professionalization and even hierarchy,55 as if these inherently contradicted its commitment to democracy. This is particularly unfortunate since Act Up, whatever its limitations, has proven itself an effective and imaginative political strategist. The problems are obviously magnified with success, as membership, finances and activities grow. This **refusal of efficient operation** and the moment of organization is intimately connected with the Left's appropriation and **privileging** of **the local** (as the site of democracy and resistance). This is yet another reason why structures of alliance are inadequate, since they often assume that an effective movement can be organized and sustained without such structuring. The Left needs to recognize the necessity of institutionalization and of systems of hierarchy, without falling back into its own authoritarianism. It needs to find reasonably democratic structures of institutionalization, even if they are impure and compromised.

#### Refusal of the state empowers its worst aspects. You don’t have to be a technocrat but you should be anti-anti-state

**Barbrook, 97 –** professor at the Hypermedia Research Centre at the University of Westminster (Richard, http://www.nettime.org/Lists-Archives/nettime-l-9706/msg00034.html)

I thought that this position is clear from my remarks about the ultra-left posturing of the 'zero-work' demand. In Europe, we have real social problems of deprivation and poverty which, in part, can only be solved by state action. This does not make me a statist, but rather an anti-anti-statist. By opposing such intervention because they are carried out by the state, anarchists are tacitly lining up with the neo-liberals. Even worse, refusing even to vote for the left, they acquiese to rule by neo-liberal parties. I deeply admire direct action movements. I was a radio pirate and we provide server space for anti-roads and environmental movements. However, this doesn't mean that I support political abstentionism or, even worse, the mystical nonsense produced by Hakim Bey. It is great for artists and others to adopt a marginality as a life style choice, but most of the people who are economically and socially marginalised were never given any choice. They are excluded from society as a result of deliberate policies of deregulation, privatisation and welfare cutbacks carried out by neo-liberal governments. During the '70s, I was a pro-situ punk rocker until Thatcher got elected. Then we learnt the hard way that voting did change things and lots of people suffered if state power was withdrawn from certain areas of our life, such as welfare and employment. Anarchism can be a fun artistic pose. However, human suffering is not.

#### Radical pessimism is self-negating—values can only be incorporated if privileged individuals who recognize the harm of society have some role in a dialogic process—this proves they have no role of the negative in their framework

**Bell and Bansal 1988 –** first tenured African-American Professor of Law at Harvard Law School, one of the originators of critical race theory, Visiting Professor at New York University School of Law, former Dean of the University of Oregon School of Law (Derrick Bell and Preeta Bansal, Yale Law Journal, 97.8, “Symposium: The Republican Civic Tradition”)

In so asking, Michelman demonstrates that he, like generations of black Americans, recognizes the defects in our democracy and yet remains motivated to sift through the ashes of our political and jurisprudential past for remnants of what might have been and, in his view, what might yet be. This is what the Michelmans and Sunsteins in our midst know, and who can say that their vision is flawed beyond all feasibility? Certainly not the old man of the story, nor those black people who recognize that their survival depends on making real the ideals that are so frequently espoused in this society and so little observed. **Skepticism about the republican ideal** would stem less from disbelief than from concern that too often coalitions forged in the name of improved government are wrought through compromises that sacrifice participation by blacks.40 That is the inescapable and **seemingly unchangeable** pattern of this country's political and judicial functioning.¶ Having Professors Michelman and Sunstein join blacks in the quest to make real the ideals and aspirations of American democracy through abiding faith in the judiciary is not a negligible contribution on their part. By gross definition, they both are members of the oppressor class. They are, however, obviously **aware of the oppression** their society imposes by color and class-based fiat. Indeed, the essays are their offering to the struggle, exercises in scholarship that are reflections of their concern and, perhaps, manifestations of their faith.¶ Inadequate? Probably, given the logic-defying barriers of power-based precedent lurking just behind the dense smokescreen of race. But the oppressed will not triumph over these barriers through faith alone. And those slender reeds that are accepted as "black progress" cannot emerge without the nurture of some whites who realize that the oppression of blacks does not oppress blacks alone, but, indeed, that it **denies all of humanity** the full emancipatory potential of critical, dialogic self-rule. Thus, while the current interest in civic republicanism may be a passing fashion for those with the luxury to revel in the life of the mind, the skepticism that is a necessary defense for the perpetually disadvantaged should not blind minorities to the possibility that faith in the intellectual solution may be as deserving of recognition as faith that our humanity will not always be subordinated because we are not white.

#### The argument that our framework is systemically bias is a self-serving assertion to sidestep clash—all of their reasons not to defend the topic can be appropriated by actors with opposite goals

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two specific individuals in an article by Iris Young

My call for a more detailed articulation of the second activist challenge may be met with the radical claim that I have begged the question. It may be said that my analysis of the activist’s challenge and my request for a more rigorous argument presume what the activist denies, namely, that arguments and reasons operate independently of ideology. Here the activist might begin to think that he made a mistake in agreeing to engage in a discussion with a deliberativist – his position throughout the debate being that one should decline to engage in argument with one’s opponents! He may say that of course activism seems lacking to a deliberativist, for the deliberativist measures the strength of a view according to her own standards. But the activist rejects those standards, claiming that they are appropriate only for seminar rooms and faculty meetings, not for real-world politics. Consequently the activist may say that by agreeing to enter into a discussion with the deliberativist, he had unwittingly abandoned a crucial element of his position. He may conclude that the **consistent** activist avoids arguing altogether, and communicates **only with** his **comrades**. Here the discussion ends.

However, the deliberativist has a further consideration to raise as his discursive partner departs for the next rally or street demonstration. The foregoing debate had presumed that there is but one kind of activist and but one set of policy objectives that activists may endorse. Yet Young’s activist is opposed not only by deliberative democrats, but also by persons who **also call themselves ‘activists’** and who are committed to a set of policy objectives quite different from those endorsed by this one activist. Once these opponents are introduced into the mix, the stance of Young’s activist becomes more evidently problematic, even by his own standards.

To explain: although Young’s discussion associates the activist always with politically progressive causes, such as the abolition of the World Trade Organization (109), the expansion of healthcare and welfare programs (113), and certain forms of environmentalism (117), not all activists are progressive in this sense. **Activists on the extreme and racist Right claim also to be fighting for justice,** fairness, **and liberation**. They contend that existing processes and institutions are ideologically hegemonic and distorting. Accordingly, **they reject the deliberative ideal on the same grounds** as Young’s activist. They advocate a program of political action that operates outside of prevailing structures, disrupting their operations and challenging their legitimacy. They claim that such action aims to enlighten, inform, provoke, and excite persons they see as complacent, naïve, excluded, and ignorant. Of course, these activists vehemently oppose the policies endorsed by Young’s activist; they argue that justice requires activism that promotes objectives such as national purity, the disenfranchisement of Jews, racial segregation, and white supremacy. More importantly, they see Young’s activist’s **vocabulary of ‘inclusion’, ‘structural inequality’, ‘institutionalized power’, as fully in line** with what they claim is a hegemonic ideology that currently dominates and systematically distorts our political discourses.21

The point here is not to imply that Young’s activist is no better than the racist activist. The point rather is that Young’s activist’s arguments are, in fact, adopted by activists of different stripes and **put in** the **service** of a wide range of policy objectives, each claiming to be just, liberatory, and properly inclusive.22 In light of this, there is a question the activist must confront. How should he deal with those who share his views about the proper means for bringing about a more just society, but promote a set of ends that he opposes?

It seems that Young’s activist has no way to deal with opposing activist programs except to fight them or, if fighting is strategically unsound or otherwise problematic, to accept a Hobbesian truce. This might not seem an unacceptable response in the case of racists; however, the question can be raised in the case of any less extreme but nonetheless opposed activist program, including different styles of politically progressive activism. Hence the deliberativist raises her earlier suspicions that, in practice, activism entails a politics based upon **interestbased power struggles amongst adversarial factions**.

#### Talisse is a critique of Young—deliberation is better than activism

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two male figures in an article by Iris Young

Accordingly, Young’s dialectic between the deliberativist and the activist is of crucial import to the theorist of deliberative democracy, and the challenges she poses need to be addressed. I shall argue in this article that the rejoinders Young develops on behalf of the activist to deliberativist criticisms of activism are insufficient, and that the deliberativist can muster stronger responses to activist challenges to deliberative democracy than those suggested by Young.11 My aspiration, then, is not to resolve the tension between activism and deliberativism, but to bolster the position of the deliberative democrat in the dialectic to which Young has called our attention; in this way, the tension between the two visions of democratic citizenship is punctuated and thus more thoroughly problematized for both the deliberativist and the activist. Hence my arguments constitute a call not simply for caution among deliberative democrats, but for further critical engagement between deliberativists and activists. Along the way, I hope to underscore elements of the deliberative democrat’s position that are insufficiently theorized in Young’s presentation.

#### Authenticity tests shut down debate—turns case and proves they turn dialogue into lecture

**Subotnik 1998** – professor of law, Touro College, Jacob D. Fuchsberg Law Center (7 Cornell J. L. & Pub. Pol'y 681)

Having traced a major strand in the development of CRT, we turn now to the strands' effect on the relationships of CRATs with each other and with outsiders. As the foregoing material suggests, the central CRT message is not simply that minorities are being treated unfairly, or even that individuals out there are in pain - assertions for which there are data to serve as grist for the academic mill - but that **the minority scholar** himself or herself hurts and hurts badly.

An important problem that concerns the very definition of the scholarly enterprise now comes into focus. What can an academic trained to [\*694] question and to doubt n72 possibly say to Patricia Williams when effectively she announces, "I hurt bad"? n73 "No, you don't hurt"? "You shouldn't hurt"? "Other people hurt too"? Or, most dangerously - and perhaps most tellingly - "What do you expect when you keep shooting yourself in the foot?" If the majority were perceived as having the well- being of minority groups in mind, these responses might be acceptable, even welcomed. And they might lead to real conversation. But, writes Williams, the failure by those "cushioned within the invisible privileges of race and power... to incorporate a sense of precarious connection as a part of our lives is... ultimately obliterating." n74

"Precarious." "Obliterating." These words will clearly invite responses only from fools and sociopaths; they will, by **effectively precluding objection**, disconcert and disunite others. "I hurt," in academic discourse, has three broad though interrelated effects. First, it demands priority from the reader's conscience. It is for this reason that law review editors, waiving usual standards, have privileged a long trail of undisciplined - even silly n75 - destructive and, above all, self-destructive arti [\*695] cles. n76 Second, by emphasizing the emotional bond between those who hurt in a similar way, "I hurt" discourages fellow sufferers from abstracting themselves from their pain in order to gain perspective on their condition. n77

[\*696] Last, as we have seen, it precludes the possibility of **open and structured conversation** with others. n78

[\*697] It is because of this conversation-stopping effect of what they insensitively call "first-person agony stories" that Farber and Sherry deplore their use. "The norms of academic civility hamper readers from challenging the accuracy of the researcher's account; it would be rather difficult, for example, to criticize a law review article by questioning the author's emotional stability or veracity." n79 Perhaps, a better practice would be to put the scholar's experience on the table, along with other relevant material, but to subject that experience to the same level of scrutiny.

If through the foregoing rhetorical strategies CRATs succeeded in limiting academic debate, why do they not have greater influence on public policy? Discouraging white legal scholars from entering the national conversation about race, n80 I suggest, has generated a kind of cynicism in white audiences which, in turn, has had precisely the reverse effect of that ostensibly desired by CRATs. It drives the American public to the right and ensures that anything CRT offers is reflexively rejected.

In the absence of scholarly work by white males in the area of race, of course, it is difficult to be sure what reasons they would give for not having rallied behind CRT. Two things, however, are certain. First, the kinds of issues raised by Williams are too important in their implications  [\*698]  for American life to be confined to communities of color. If the lives of minorities are heavily constrained, if not fully defined, by the thoughts and actions of the majority elements in society, it would seem to be of great importance that white thinkers and doers participate in open discourse to bring about change. Second, given the lack of engagement of CRT by the community of legal scholars as a whole, the discourse that should be taking place at the highest scholarly levels has, by default, been displaced to faculty offices and, more generally, the streets and the airwaves.

#### Personalization doesn’t solve their offense—the absence of rules doesn’t change power relations, it just hegemonic actors re-appropriate the same logic to insulate themselves from criticism. Their approach is like trying to cure heart malfunction by eliminating hearts

**Tonn 2005** – Professor of Communications at the University of Maryland (Fall, Mari Boor, Rhetoric & Public Affairs, 8.3, “Taking Conversation, Dialogue, and Therapy Public”)

This widespread recognition that access to public deliberative processes and the ballot is a baseline of any genuine democracy points to the most curious irony of the conversation movement: portions of its constituency. Numbering among the most fervid dialogic loyalists have been some feminists and multiculturalists who represent groups historically denied both the right to speak in public and the ballot. Oddly, some feminists who championed the slogan “The Personal Is Political” to emphasize ways relational power can oppress tend to ignore similar dangers lurking in the appropriation of conversation and dialogue in public deliberation. Yet the conversational model’s emphasis on empowerment through intimacy can duplicate the power networks that traditionally excluded females and nonwhites and gave rise to numerous, sometimes necessarily uncivil, demands for democratic inclusion. Formalized participation structures in deliberative processes obviously cannot ensure the elimination of relational power blocs, but, as Freeman pointed out, **the absence of formal rules leaves relational power unchecked** and potentially capricious. Moreover, the privileging of the self, personal experiences, and individual perspectives of reality intrinsic in the conversational paradigm **mirrors justifications once used by dominant groups** who used their own lives, beliefs, and interests as templates for hegemonic social premises to oppress women, the lower class, and people of color. Paradigms infused with the therapeutic language of emotional healing and coping likewise flirt with the type of psychological diagnoses once ascribed to disaffected women. But as Betty Friedan’s landmark 1963 The Feminist Mystique argued, the cure for female alienation was neither tranquilizers nor attitude adjustments fostered through psychotherapy but, rather, unrestricted opportunities.102 The price exacted by promoting approaches to complex public issues— models that cast conventional deliberative processes, including the marshaling of evidence beyond individual subjectivity, as “elitist” or “monologic”—can be steep. Consider comments of an aide to President George W. Bush made before reports concluding Iraq harbored no weapons of mass destruction, the primary justification for a U.S.-led war costing thousands of lives. Investigative reporters and other persons sleuthing for hard facts, he claimed, operate “in what we call the reality-based community.” Such people “believe that solutions emerge from [the] judicious study of discernible reality.” Then baldly flexing the muscle afforded by increasingly popular social-constructionist and poststructuralist models for conflict resolution, he added: “That’s not the way the world really works anymore . . . We’re an empire now, and when we act, we create our own reality. And while you’re studying that reality— judiciously, as you will—we’ll act again, creating other new realities.”103 The recent fascination with public conversation and dialogue most likely is a product of frustration with the tone of much public, political discourse. Such concerns are neither new nor completely without merit. Yet, as Burke insightfully pointed out nearly six decades ago, “A perennial embarrassment in liberal apologetics has arisen from its ‘surgical’ proclivity: its attempt to outlaw a malfunction by outlawing the function.” The attempt to eliminate flaws in a process by eliminating the entire process, he writes, “is like trying to eliminate heart disease by eliminating hearts.”104 Because public argument and deliberative processes are the “heart” of true democracy, supplanting those models with social and therapeutic conversation and dialogue jeopardizes the very pulse and lifeblood of democracy itself.

#### The ballot makes debate a goal-oriented conversation—local experience has to be directed toward a topical stance or else it lapses into incontestability and the tyranny of structurelessness which becomes ineffective and stagnant

**Tonn 2005** – Professor of Communications at the University of Maryland (Fall, Mari Boor, Rhetoric & Public Affairs, 8.3, “Taking Conversation, Dialogue, and Therapy Public”)

In certain ways, Schudson’s initial reluctance to dismiss public conversation echoes my own early reservations, given the ideals of egalitarianism, empowerment, and mutual respect conversational advocates champion. Still, in the spirit of the dialectic ostensibly underlying dialogic premises, this essay argues that various negative consequences can result from transporting conversational and therapeutic paradigms into public problem solving. In what follows, I extend Schudson’s critique of a conversational model for democracy in two ways: First, whereas Schudson primarily offers a theoretical analysis, I interrogate public conversation as a praxis in a variety of venues, illustrating how public “conversation” and “dialogue” have been coopted to silence rather than empower marginalized or dissenting voices. In practice, public conversation easily can emulate what feminist political scientist Jo Freeman termed “the **tyranny of structurelessness**” in her classic 1970 critique of consciousness raising groups in the women’s liberation movement,15 as well as the key traits Irving L. Janis ascribes to “groupthink.”16 Thus, contrary to its promotion as a means to neutralize hierarchy and exclusion in the public sphere, public conversation can and has accomplished the reverse. When such moves are rendered transparent, public conversation and dialogue, I contend, risk increasing rather than diminishing political cynicism and alienation. Second, whereas Schudson focuses largely on ways a conversational model for democracy may mute an individual’s voice in crafting a resolution on a given question at a given time, I draw upon insights of Dana L. Cloud and others to consider ways in which a therapeutic, conversational approach to public problems can stymie productive, collective action in two respects.17 First, because conversation has no clearly defined goal, a public conversation may engender inertia as participants become **mired in repeated airings of personal experiences without a mechanism** to lend such expressions direction and closure. As Freeman aptly notes, although “[u]nstructured groups may be very effective in getting [people] to talk about their lives[,] they aren’t very good for getting things done. Unless their mode of operation changes, groups flounder at the point where people tire of ‘just talking.’”18 Second, because the therapeutic bent of much public conversation locates social ills and remedies within individuals or dynamics of interpersonal relationships, public conversations and dialogues risk becoming substitutes for policy formation necessary to correct structural dimensions of social problems. In mimicking the emphasis on the individual in therapy, Cloud warns, the therapeutic rhetoric of “healing, consolation, and adaptation or adjustment” tends to “encourage citizens to perceive political issues, conflicts, and inequities as personal failures subject to personal amelioration.”19

### 1nr

#### Restrictions pertain to the content of energy production, not its modalities. The plan merely enables different place and timing of production – that’s distinct

Martin Borowski (Faculty at Birmingham Law School, Vice-President of the British Section of the International Association for Philosophy of Law and Social Philosophy) 2003 “Religious Freedom as a Fundamental Human Right, a Rawlsian Perspective” in Pluralism and Law, Conference Proceedings” p. 58

Where it is a question of the diminution of the content of basic liberties, Rawls distinguishes between restriction and regulation. He Illustrates this distinction by turning to the example of freedom of speech. Interference with the content of speech counts as a restriction, whereas interference with the modalities of speech, such as place and time, counts merely as regulation. Regulations do not offend against basic liberties; rather they show that basic liberties are self-limiting.5’ It is necessary, however, that the central range of application of the basic liberties be respected. It must be assumed, in Rawls’ theory, that the distinction between restriction and regulation survives the transformation from basic liberty to basic right or freedom, such that the distinction can be found at the stage of constitutional law, too. This gives voice to the question of whether this distinction can serve as an adequate reconstruction of the constitutional protection afforded to religious freedom.

#### Precisely defining terms is pedagogically valuable—T debates provide portable skills needed to settle all major questions

**Steinberg & Freeley 8** \*Austin J. Freeley is a Boston based attorney who focuses on criminal, personal injury and civil rights law, AND \*\*David L. Steinberg , Lecturer of Communication Studies @ U Miami, Argumentation and Debate: Critical Thinking for Reasoned Decision Making pp61-63

I. THE IMPORTANCE OF DEFINING TERMS

The definition of terms—the advocate's supported interpretation of the meaning of the words in a proposition—is an essential part of debate. In some instances the opposing advocates will agree right away on the definition of terms, and the debate will move on to other issues. In other cases the locus of the debate may be the definition of a key term or terms, and definitions become the **"voting issue**" that decides the debate. In all debates, however, a shared understanding of the interpretation of the proposition is necessary to guide argumentation and decision making.

Many intercollegiate debate propositions call for the "federal government" to adopt a certain policy. Often the term is self-evident in the context of the proposition, and no definition is necessary. In debates on the 2001-2002 CEDA proposition. "Resolved: That the United States Federal Government should substantially increase federal control throughout Indian Country in one or more of the following areas: child welfare, criminal justice, employment, environmental protection, gaming, resource management, taxation," the affirmative merely designated the appropriate federal agency (for example. The bureau of Indian Affairs or the Environmental Protection Agency) to cam' out its policy, and the debate moved on to other issues. However, sometimes other terms in the proposition (for instance, Indian Country) become critical issues of the debate. Not infrequently the negative will raise the issue of topicality and argue that the affirmative's plan is not the best definition, or interpretation, of the proposition. In debates on propositions of value, the clash over definitions or criteria may be crucial to the outcome.

In debates outside the educational setting, the same situation prevails. In some debates the definition of terms is easy and obvious—they need only be stated "for the record." and the debate proceeds to other issues. In other debates however, the definition may be all-important. For instance physicians, clerics, and ethicists conduct long, hard-fought debates on the critical issue of when life begins: At conception? When the fetus becomes capable of surviving outside the womb? When the brain begins to function? Or at the moment of birth?

Exactly the opposite problem arose, and continues, in debates over the use of organ transplants. Does death occur when breathing slops? When the heart stops? Or when the brain ceases to function? Some states have debated this Issue and adopted new definitions of death; in other states the debate continues. Similarly, environmentalists seeking protection from development for valued resources debate the definition of wetlands in public hearings; owners of sports franchises work to redefine players' salaries to fit within predetermined salary caps; and customers considering new product purchases study competing definitions of value. In February 2004, President Bush called upon the Congress to "promptly pass and send to the states for ratification, an amendment to our Constitution defining and protecting marriage as a union of a man and a woman as husband and wife." This advocacy by the president was an attempt to define "marriage" in such a way as to limit it to heterosexual couples. A public debate about the meaning of marriage, and its alternative, "civil union," ensued. Definitional debates have political, moral, and personal implications. What is poverty? Obesity? Adulthood? In 2007, the meaning of the term "surge" in reference to the United States military' action in Iraq was hotly contested. Was this an expansion of the war or simply provision of necessary resources to achieve existing objectives? The 2007 immigration reform offered the opportunity for illegal immigrants working in this country to achieve citizenship through a cumbersome and expensive process. The reform legislation failed in part because it was termed "amnesty" by its opponents. Likewise, the definition of "terrorism" creates significant problems in our foreign policy.

#### Side switching does not equate to speaking from nowhere or divesting yourself of social background—our argument is that if your only exposure to the topic is finding ways to critique or avoid it, then you become solely capable of preaching to the choir. Debate is unique because it gives opportunities to tactically inhabit other perspectives without enlisting in those causes for the sake of skill development and mutual testing

**Haskell 1990** – history professor at Rice University (May, Thomas, History and Theory, 29.2, “Objectivity is Not Neutrality: Rhetoric vs. Practice in Peter Novick’s That Noble Dream”, p. 129-157)

Detachment functions in this manner **not by draining** us of **passion,** but by helping to **channel** our intellectual passions in such a way as **to insure collision** with rival perspectives. In that collision, if anywhere, our thinking transcends both the idiosyncratic and the conventional. Detachment both socializes and deparochializes the work of intellect; it is the quality that fits an individual to participate fruitfully in what is essentially a communal enterprise. Objectivity is so much a product of social arrangements that individuals and particular opinions scarcely deserve to be called objective, yet the social arrangements that foster objectivity have no basis for existence apart from individual striving for detachment. Only insofar as the members of the community are disposed to set aside the perspective that comes most spontaneously to them, and strive to see things in a detached light, is there any likelihood that they will engage with one another mentally and provoke one another through mutual criticism to the most complete, least idiosyncratic, view that humans are capable of. When the ascetic effort at detachment fails, as it often does, **we "talk past one another**," producing nothing but discordant soliloquies, each fancying itself the voice of reason. The kind of thinking I would call objective leads only a fugitive existence outside of communities that enjoy a high degree of independence from the state and other external powers, and which are dedicated internally not only to detachment, but also to intense mutual criticism and to the protection of dissenting positions against the perpetual threat of majority tyranny. Some hypothetical examples may clarify what I mean by objective thinking and show how remote it is from neutrality. Consider an extreme case: the person who, although capable of detachment, suspends his or her own perceptions of the world not in the expectation of gaining a broader perspective, but only in order **to learn how opponents think** so as to demolish their arguments more effectively - who is, in\* short, a polemicist, deeply and fixedly committed as a lifelong project to a particular political or cultural or moral program. Anyone choosing such a life obviously risks being thought boorish or provincial, but insofar as such a person successfully enters into the thinking of his or her rivals and produces arguments potentially compelling not only to those who already share the same views, but to outsiders as well, I see no reason to withhold the laurel of objectivity. 10 There is nothing objective about hurling imprecations at apostates or catechizing the faithful, but as long as the polemicist truly engages the thinking of the enemy he or she is being as objective as anyone. In contrast, the person too enamored of his or her own interpretation of things seriously and sympathetically **to entertain alternatives, even for the sake of learning** how best to defeat them, fails my test of objectivity, no matter how serene and even tempered. The most common failure of objectivity is preaching to the converted, proceeding in a manner that complacently presupposes the pieties of one's own coterie and makes no effort to appreciate or appeal to the perspectives of outsiders. In contrast, the most commonly observed fulfillment of the ideal of objectivity in the historical profession is simply the powerful argument-the text that reveals by its every twist and turn its respectful appreciation of the alternatives it rejects. Such a text attains power precisely because its author has managed to suspend momentarily his or her own perceptions so as to anticipate and take account of objections and alternative constructions -not those of some straw man, but those that truly issue from the rival's position, understood as sensitively and stated as eloquently as the rival him- or herself could desire. Nothing is rhetorically more powerful than this, and nothing, not even capitulation to the rival, could acknowledge any more vividly the force and respectability of the rival's perspective. **To** mount a telling **attack** on **a position, one must first inhabit it**. Those so habituated to their customary intellectual abode that they cannot even explore others can **never be persuasive** to anyone but fellow habitues. That is why powerful arguments are often more faithful to the complexity and fragility of historical interpretation - more faithful even to the irreducible plurality of human perspectives, when that is, in fact, the case -than texts that abjure position-taking altogether and ostentatiously wallow in displays of "reflexivity" and "undecidability." The powerful argument is the highest fruit of the kind of thinking I would call objective, and in it **neutrality plays no part**. Authentic objectivity has simply nothing to do with the television newscaster's mechanical gesture of allocating the same number of seconds to both sides of a question, or editorially splitting the difference between them, irrespective of their perceived merits

#### Deliberation must be externally constrained by a topic to generative effective reasoning—devil’s advocate norms check group polarization and cognitive bias

**Mercier and Landemore 2011** – \*Philosophy, Politics and Economics prof @ U Penn, \*\*Poli Sci prof @ Yale (Hugo and Hélène, Political Psychology, “Reasoning is for arguing: Understanding the successes and failures of deliberation”, http://sites.google.com/site/hugomercier/publications)

Reasoning can function outside of its normal conditions when it is used purely internally. But it is not enough for reasoning to be done in public to achieve good results. And indeed the problems of individual reasoning highlighted above, such as polarization and overconfidence, can also be found in group reasoning (Janis, 1982; Stasser & Titus, 1985; Sunstein, 2002). Polarization and overconfidence happen because not all group discussion is deliberative. According to some definitions of deliberation, including the one used in this paper, **reasoning has to be applied to the same thread of argument** from different opinions for deliberation to occur. As a consequence, “If the participants are mostly like-minded or hold the same views before they enter into the discussion, they are not situated in the circumstances of deliberation.” (Thompson, 2008: 502). We will presently review evidence showing that the absence or the silencing of dissent is a quasi-necessary condition for polarization or overconfidence to occur in groups. Group polarization has received substantial empirical support. 11 So much support in fact that Sunstein has granted group polarization the status of law (Sunstein, 2002). There is however an important caveat: **group polarization** will mostly happen when people share an opinion to begin with. In defense of his claim, Sunstein reviews an impressive number of empirical studies showing that many groups tend to form **more extreme opinions** following discussion. The examples he uses, however, offer as convincing an illustration of group polarization than of the necessity of having group members that share similar beliefs at the outset for polarization to happen (e.g. Sunstein, 2002: 178). Likewise, in his review of the group polarization literature, Baron notes that “The crucial antecedent condition for group polarization to occur is the presence of a likeminded group; i.e. individuals who share a preference for one side of the issue.” (Baron, 2005). Accordingly, when groups do not share an opinion, they tend to depolarize. This has been shown in several experiments in the laboratory (e.g. Kogan & Wallach, 1966; Vinokur & Burnstein, 1978). Likewise, studies of deliberation about political or legal issues report that many groups do not polarize (Kaplan & Miller, 1987; Luskin, Fishkin, & Hahn, 2007; Luskin et al., 2002; Luskin, Iyengar, & Fishkin, 2004; Mendelberg & Karpowitz, 2000). On the contrary, some groups show a homogenization of their attitude (they depolarize) (Luskin et al., 2007; Luskin et al., 2002). The contrasting effect of discussions with a supportive versus dissenting audience is transparent in the results reported by Hansen ( 2003 reported by Fishkin & Luskin, 2005). Participants had been exposed to new information about a political issue. When they discussed it with their family and friends, they learned more facts supporting their initial position. On the other hand, during the deliberative weekend—and the exposition to other opinions that took place—they learned more of the facts supporting the view they disagreed with. The present theory, far from being contradicted by the observation that groups of likeminded people reasoning together tend to polarize, can in fact account straightforwardly for this observation. When people are engaged in a genuine deliberation, the **confirmation bias** present in each individual’s reasoning is checked, compensated by the confirmation bias of individuals who defend another opinion. When no other opinion is present (or expressed, or listened to), people will be disinclined to use reasoning to critically examine the arguments put forward by other discussants, since they share their opinion. Instead, they will use reasoning to strengthen these arguments or find other arguments supporting the same opinion. In most cases the reasons each individual has for holding the same opinion will be partially non-overlapping. Each participant will then be exposed to new reasons supporting the common opinion, reasons that she is unlikely to criticize. It is then only to be expected that group members should strengthen their support for the common opinion in light of these new arguments. In fact, groups of like-minded people should have little endogenous motivation to start reasoning together: what is the point of arguing with people we agree with? In most cases, such groups are lead to argue because of some **external constraint**. These constraints can be more or less artificial—a psychologist telling participants to deliberate or a judge asking a jury for a well supported verdict—but they have to be factored in the explanation of the phenomenon. 4. Conclusion: a situational approach to improving reasoning We have argued that reasoning should not be evaluated primarily, if at all, as a device that helps us generate knowledge and make better decisions through private reflection. Reasoning, in fact, does not do those things very well. Instead, we rely on the hypothesis that the function of reasoning is to find and evaluate arguments in deliberative contexts. This evolutionary hypothesis explains why, when reasoning is used in its normal conditions—in a deliberation—it can be expected to lead to better outcomes, consistently allowing deliberating groups to reach epistemically superior outcomes and improve their epistemic status. Moreover, seeing reasoning as an argumentative device also provides a straightforward account of the otherwise puzzling confirmation bias—the tendency to search for arguments that favor our opinion. The confirmation bias, in turn, generates most of the problems people face when they reason in abnormal conditions— when they are not deliberating. This will happen to people who reason alone while failing to entertain other opinions in a private deliberation and to groups in which one opinion is so dominant as to make all others opinions—if they are even present—unable to voice arguments. In both cases, the confirmation bias will go unchecked and create polarization and overconfidence. We believe that the argumentative theory offers a good explanation of the most salient facts about private and public reasoning. This explanation is meant to supplement, rather than replace, existing psychological theories by providing both an answer to the why-questions and a coherent integrative framework for many previously disparate findings. The present article was mostly aimed at comparing deliberative vs. non-deliberative situations, but the theory could also be used to make finer grained predictions within deliberative situations. It is important to stress that the theory used as the backbone for the article is a theory of reasoning. The theory can only make predictions about reasoning, and not about the various other psychological mechanisms that impact the outcome of group discussion. We did not aim at providing a general theory of group processes that could account for all the results in this domain. But it is our contention that the best way to reach this end is by investigating the relevant psychological mechanisms and their interaction. For these reasons, the present article should only be considered a first step towards more fined grained predictions of when and why deliberation is efficient. Turning now to the consequences of the present theory, we can note first that our emphasis on the efficiency of diverse groups sits well with another recent a priori account of group competence. According to Hong and Page’s Diversity Trumps Ability Theorem for example, under certain plausible conditions, a diverse sample of moderately competent individuals will outperform a group of the most competent individuals (Hong & Page, 2004). Specifically, what explains the superiority of some groups of average people over smaller groups of experts is the fact that cognitive diversity (roughly, the ability to interpret the world differently) can be more crucial to group competence than individual ability (Page, 2007). That argument has been carried over from groups of problem-solvers in business and practical matters to democratically deliberating groups in politics (e.g., Anderson, 2006; Author, 2007, In press). At the practical level, the present theory potentially has important implications. Given that individual reasoning works best when confronted to different opinions, the present theory supports the improvement of the presence or expression of dissenting opinions in deliberative settings. Evidently, many people, in the field of deliberative democracy or elsewhere, are also advocating such changes. While these common sense suggestions have been made in the past (e.g., Bohman, 2007; Sunstein, 2003, 2006), the present theory provides additional arguments for them. It also explains why approaches focusing on individual rather than collective reasoning are not likely to be successful. Specifically tailored practical suggestions can also be made by using departures from the normal conditions of reasoning as diagnostic tools. Thus, different departures will entail different solutions. Accountability—having to defends one’s opinion in front of an audience—can be used to bring individual reasoners closer to a situation of private deliberation. The use of different aggregation mechanisms could help identify the risk of deliberation among like-minded people. For example, before a group launches a discussion, a preliminary vote or poll could establish the extent to which different opinions are represented. If this procedure shows that people agree on the issue at hand, then skipping the discussion may save the group some efforts and reduce the risk of polarization. Alternatively, a **devil’s advocate** could be introduced in the group to defend an alternative opinion (e.g. Schweiger, Sandberg, & Ragan, 1986).

#### Debate is distinct from public speaking—defending something for competitive purposes generates reasoned convictions which turns their impact

**Galloway, 7** –professor of communications at Samford University (Ryan, “Dinner and Conversation at the Argumentative Table: Reconceptualizing Debate as an Argumentative Dialogue”, Contemporary Argumentation and Debate, Vol. 28 (2007), ebsco)

Falsely Comparing Debate with Public Speaking

The argument that debaters should not argue in favor of ¶ ideas that they do not believe treats debate as with a normal public speaking event. This controversy was discussed thoroughly in various speech journals throughout the 1950s and 1960s, with most ¶ authors coming to the conclusion that debate is a unique public ¶ speaking event, where participants and observers disassociate the ¶ debater from their role. ¶ Richard Murphy lays out the case that students should not ¶ be forced to say something they do not believe, a concept quite ¶ similar to modern-day advocates of the notion that affirmatives should not have to defend the topic (1957; 1963). Murphy contends, “The argument against debating both sides is very simple and consistent. Debate…is a form of public speaking. A public ¶statement is a public commitment” (1957, p. 2). Murphy believed students should discuss and research an issue until they understood their position on the issue and then take the stand and defend only ¶ that side of the proposition. Murphy’s fear was that students risk becoming a “weather vane,” having “character only when the wind is not blowing” (1963, p. 246). ¶ In contrast, Nicholas Cripe distinguished between speaking and debating (1957, p. 210). Cripe contended that, unlike a public speaker, a debater is “not trying to convince the judges, or ¶ his opponents” of the argument but merely to illustrate that their team has done the superior debating (p. 211). Debating in this ¶ sense exists with an obligation to give each position its best defense, in much the way an attorney does for a client. Here, the process of **defending a position for** the purposes of **debate is** ¶ **distinct from** their **advocacy** for a cause **in a larger sense**. As such, they are like Socrates in the Phaedrus, speaking with their heads covered so as not to anger the gods (Murphy 1957, p. 3). ¶ Additionally, debate is unlike public speaking since it ¶ happens almost always in a private setting. There are several ¶ distinctions. First, very few people watch individual contest ¶ rounds. The vast majority of such rounds take place with five ¶ people in the room—the four debaters, and the lone judge. Even ¶ elimination rounds with the largest audiences have no more than ¶ approximately one hundred observers, almost all of whom are ¶ debaters. Rarely do people outside the community watch debates. ¶ Also, debate has developed a set of norms and procedures quite ¶ unlike public speaking. While some indict these norms (Warner ¶ 2003), the rapid rate of speed and heavy reliance on evidence ¶ distinguishes debate from public speaking. Our activity is more like the closed debating society that Murphy admits can be judged by “pedagogical, rather than ethical, standards” (1957, p. 7). ¶ When debates do occur that target the general public (public debates on campus for example), moderators are careful to explain that debaters may be playing devil’s advocate. Such statements prevent confusion regarding whether or not a debater speaks in a role or from personal conviction. While speaking from conviction is a political act, speaking in accordance with a role is a pedagogical one (Klopf & McCroskey, 1964, p. 37).¶ However, this does not mean that debaters are victims. The sophistication of modern argument and the range of strategic choices available to modern debaters allow them to choose positions that are consistent with their belief structures. The rise of plan-inclusive counterplans, kritiks, and other strategies allow negative teams to largely align themselves with agreeable affirmative cases while distinguishing away narrow slivers of arguments that allow debaters to rarely argue completely against their convictions. While some contend that this undermines the value of switch-side debate (Ellis, 2008b; Shanahan, 2004), in fact, the notion that debaters employ nuanced answers to debate topics illustrates the complexity of modern debate resolutions.¶ Those who worry that competitive academic debate will ¶ cause debaters to lose their convictions, as Greene and Hicks do in ¶ their 2005 article, confuse the cart with the horse. Conviction is not ¶ a priori to discussion, it flows from it. A. Craig Baird argued, ¶ “Sound conviction depends upon a thorough understanding of the ¶ controversial problem under consideration (1955, p. 5). Debate ¶ encourages rigorous training and scrutiny of arguments before ¶ debaters declare themselves an advocate for a given cause. Debate ¶ creates an ethical obligation to interrogate ideas from a neutral ¶ position so that they may be freely chosen subsequently.

#### The Fermi nuclear reactor accident was a net plus -- nobody died, no radiation was released and it ultimately lead to safer reactor designs of the future. No technology is risk-free, nuclear energy is safer than coal or fossil fuels and continuously improves in response to accidents but overall has an exemplary safety record -- their 1ac scare-tactics misunderstand improvements in reactor design since Fermi -- their flawed analysis is a reason to vote negative

**WNA '12** September, World Nuclear Association "Safety of Nuclear Power Reactors" http://www.world-nuclear.org/info/inf06.html

It should be emphasised **that a commercial-type power reactor simply cannot under any circumstances explode like a nuclear bomb - the fuel is not enriched beyond about 5%.** The International Atomic Energy Agency (IAEA) was set up by the United Nations in 1957. One of its functions was to act as an auditor of world nuclear safety, and this role was increased greatly following the Chernobyl accident. It prescribes safety procedures and the reporting of even minor incidents. Its role has been strengthened since 1996 (see later section). Every country which operates nuclear power plants has a nuclear safety inspectorate and all of these work closely with the IAEA. **While nuclear power plants are designed to be safe in their operation and safe in the event of any malfunction or accident, no industrial activity can be represented as entirely risk-free. Incidents and accidents may happen, and as in other industries, will lead to progressive improvement in safety**. Achieving safety: the record so far Operational safety is a prime concern for those working in nuclear plants. Radiation doses are controlled by the use of remote handling equipment for many operations in the core of the reactor. Other controls include physical shielding and limiting the time workers spend in areas with significant radiation levels. These are supported by continuous monitoring of individual doses and of the work environment to ensure very low radiation exposure compared with other industries. **Concerning possible accidents, up to the early 1970s, some extreme assumptions were made about the possible chain of consequences. These gave rise to a genre of dramatic fiction** (eg The China Syndrome) in the public domain **and** also some **solid conservative engineering** including containment structures (at least in Western reactor designs) in the industry itself. Licensing regulations were framed accordingly. One mandated safety indicator is the calculated probable frequency of degraded core or core melt accidents. **The** US Nuclear Regulatory Commission **(NRC) specifies that reactor designs must meet a 1 in 10,000 year core damage frequency, but modern designs exceed this. US utility requirements are 1 in 100,000 years, the best currently operating plants are about 1 in 1 million and those likely to be built in the next decade are almost 1 in 10 million**. While this calculated core damage frequency has been one of the main metrics to assess reactor safety, European safety authorities prefer a deterministic approach, focusing on actual provision of back-up hardware, though they also undertake probabilistic safety analysis for core damage frequency. **Even months after the Three Mile Island (TMI) accident in 1979 it was assumed that there had been no core melt because there were no indications of severe radioactive release even inside the containment**. It turned out that in fact about half the core had melted. Until 2011 this remained the only core melt in a reactor conforming to NRC safety criteria, and the effects were contained as designed, without radiological harm to anyone.\* Greifswald 5 in East Germany had a partial core melt in November 1989, due to malfunctioning valves (root cause: shoddy manufacture) and was never restarted. At Fukushima in 2011 (a different reactor design with penetrations in the bottom of the pressure vessel) the three reactor cores evidently largely melted in the first two or three days, but this was not confirmed for about ten weeks. It is still not certain how much of the core material was not contained by the pressure vessels and ended up in the bottom of the drywell containments, though certainly there was considerable release of radionuclides to the atmosphere early on, and later to cooling water\*\*. \* About this time there was alarmist talk of the so-called "China Syndrome", a scenario where the core of such a reactor would melt, and due to continual heat generation, melt its way through the reactor pressure vessel and concrete foundations to keep going, perhaps until it reached China on the other side of the globe! The TMI accident proved the extent of truth in the proposition, and the molten core material got exactly 15 mm of the way to China as it froze on the bottom of the reactor pressure vessel. At Fukushima, cooling was maintained just long enough apparently to avoid testing the containment in this way. \*\* Ignoring isotopic differences, there are about one hundred different fission products in fuel which has been undergoing fission. A few of these are gases at normal temperatures, more are volatile at higher temperatures, and both will be released from the fuel if the cladding is damaged. The latter include iodine (easily volatalised, at 184°C) and caesium (671°C), which were the main radionuclides released at Fukushima, first into the reactor pressure vessel and then into the containment which in unit 2 apparently ruptured early on day 5. In addition, as cooling water was flushed through the hot core, soluble fission products such as caesium dissolved in it, which created the need for a large water treatment plant to remove them. However apart from these accidents and the Chernobyl disaster **there have been about ten core melt accidents - mostly in** military or **experimental reactors** - [Appendix 2](http://www.world-nuclear.org/info/inf06app.html) lists most of them. **None resulted in any hazard outside the plant from the core melting, though in one case there was significant radiation release due to burning fuel in hot graphite** (similar to Chernobyl but smaller scale). The Fukushima accident should also be considered in that context, since the fuel was badly damaged and there were significant off-site radiation releases. Regulatory requirements today for new plants are that the effects of any core-melt accident must be confined to the plant itself, without the need to evacuate nearby residents. The main safety concern has always been the possibility of an uncontrolled release of radioactive material, leading to contamination and consequent radiation exposure off-site. . Earlier assumptions were that this would be likely in the event of a major loss of cooling accident (LOCA) which resulted in a core melt. The TMI experience suggested otherwise, but at Fukushima this is exactly what happened. In the light of better understanding of the physics and chemistry of material in a reactor core under extreme conditions it became evident that even a severe core melt coupled with breach of containment would be unlikely to create a major radiological disaster from many Western reactor designs, but the Fukushima accident showed that this did not apply to all. Studies of the post-accident situation at Three Mile Island (where there was no breach of containment) supported the suggestion, and analysis of Fukushima is pending. Certainly the matter was severely tested with three reactors of the Fukushima Daiichi nuclear power plant in Japan in March 2011. Cooling was lost after a shutdown, and it proved impossible to restore it sufficiently to prevent severe damage to the fuel. The reactors, dating from 1971-75, were written off. A fourth is also written off due to damage from a hydrogen explosion. An OECD/NEA report in 2010 pointed out that the theoretically-calculated frequency for a large release of radioactivity from a severe nuclear power plant accident has reduced by a factor of 1600 between the early Generation I reactors as originally built and the Generation III/III+ plants being built today. **Earlier designs however have been progressively upgraded through their operating lives**. It has long been asserted that nuclear reactor accidents are the epitome of low-probability but high-consequence risks. Understandably, with this in mind, some people were disinclined to accept the risk, however low the probability. However, **the physics and chemistry of a reactor core, coupled with but not wholly depending on the engineering, mean that the consequences of an accident are likely in fact be much less severe than those from other industrial and energy sources**. Experience, including Fukushima, bears this out. At Chernobyl the [kind of reactor](http://www.world-nuclear.org/info/inf31.html) and its burning contents which dispersed radionuclides far and wide tragically meant that the results were severe. This once and for all vindicated the desirability of designing with inherent safety supplemented by robust secondary safety provisions and avoiding that kind of reactor design. However, the problem here was not burning graphite as popularly quoted. The graphite was certainly incandescent as a result of fuel decay heat - sometimes over 1000°C - and some of it oxidised to carbon monoxide which burned along with the fuel cladding. **The use of nuclear energy for electricity generation can be considered extremely safe. Every year several thousand people die in coal mines to provide this widely used fuel for electricity. There are also significant health and environmental effects arising from fossil fuel use. To date, even the Fukushima accident has caused no deaths**, and the IAEA reported on 1 June 2011: "to date, no health effects have been reported in any person as a result of radiation exposure." In passing, it is relevant to note that the safety record of the US nuclear navy from 1955 on is excellent, this being attributed to a high level of standardisation in over one hundred naval power plants and in their maintenance, and the high quality of the Navy's training program. Until the 1980s, the Soviet naval record stood in marked contrast. Achieving optimum nuclear safety To achieve optimum safety, nuclear plants in the western world operate using a **'defence-in-depth' approach**, with multiple safety systems supplementing the natural features of the reactor core. Key aspects of the approach are: high-quality design & construction, equipment which prevents operational disturbances or human failures and errors developing into problems, comprehensive monitoring and regular testing to detect equipment or operator failures, redundant and diverse systems to control damage to the fuel and prevent significant radioactive releases, provision to confine the effects of severe fuel damage (or any other problem) to the plant itself. These can be summed up as: Prevention, Monitoring, and Action (to mitigate consequences of failures). The safety provisions include a series of physical barriers between the radioactive reactor core and the environment, the provision of multiple safety systems, each with backup and designed to accommodate human error. Safety systems account for about one quarter of the capital cost of such reactors. As well as the physical aspects of safety, there are institutional aspects which are no less important - see following section on International Collaboration. The barriers in a typical plant are: the fuel is in the form of solid ceramic (UO2) pellets, and radioactive fission products remain largely bound inside these pellets as the fuel is burned. The pellets are packed inside sealed zirconium alloy tubes to form fuel rods. These are confined inside a large steel pressure vessel with walls up to 30 cm thick - the associated primary water cooling pipework is also substantial. All this, in turn, is enclosed inside a robust reinforced concrete containment structure with walls at least one metre thick. This amounts to three significant barriers around the fuel, which itself is stable up to very high temperatures. These barriers are monitored continually. The fuel cladding is monitored by measuring the amount of radioactivity in the cooling water. The high pressure cooling system is monitored by the leak rate of water, and the containment structure by periodically measuring the leak rate of air at about five times atmospheric pressure. Looked at functionally, the three basic safety functions in a nuclear reactor are: to control reactivity, to cool the fuel and to contain radioactive substances. The main safety features of most reactors are inherent - negative temperature coefficient and negative void coefficient. The first means that beyond an optimal level, as the temperature increases the efficiency of the reaction decreases (this in fact is used to control power levels in some new designs). The second means that if any steam has formed in the cooling water there is a decrease in moderating effect so that fewer neutrons are able to cause fission and the reaction slows down automatically. **In the 1950s and '60s some experimental reactors in the Idaho desert were deliberately tested to destruction to verify that large reactivity excursions were self-limiting and would automatically shut down the fission reaction. These tests verified that this was the case**. Beyond the control rods which are inserted to absorb neutrons and regulate the fission process, the main engineered safety provisions are the back-up emergency core cooling system (ECCS) to remove excess heat (though it is more to prevent damage to the plant than for public safety) and the containment. Traditional reactor safety systems are 'active' in the sense that they involve electrical or mechanical operation on command. Some engineered systems operate passively, eg pressure relief valves. Both require parallel redundant systems. Inherent or full passive safety design depends only on physical phenomena such as convection, gravity or resistance to high temperatures, not on functioning of engineered components. All reactors have some elements of inherent safety as mentioned above, but in some recent designs the passive or inherent features substitute for active systems in cooling etc. Such a design would have averted the Fukushima accident, where loss of electrical power resulted is loss of cooling function. The basis of design assumes a threat where due to accident or malign intent (eg terrorism) there is core melting and a breach of containment. This double possibility has been well studied and provides the basis of exclusion zones and contingency plans. Apparently **during the Cold War neither Russia nor the USA targeted the other's nuclear power plants because the likely damage would be modest**. Nuclear power plants are designed with sensors to shut them down automatically in an earthquake, and this is a vital consideration in many parts of the world. (see [paper on Earthquakes](http://www.world-nuclear.org/info/inf18.html)) **In both the Three Mile Island (TMI) and Fukushima accidents the problems started after the reactors were shut down – immediately at TMI and after an hour at Fukushima, when the tsunami arrived**. The need to remove decay heat from the fuel was not met in each case, so core melting started to occur within a few hours. Cooling requires water circulation and an external heat sink. If pumps cannot run due to lack of power, gravity must be relied upon, but this will not get water into a pressurised system – either reactor pressure vessel or containment. Hence there is provision for relieving pressure, sometimes with a vent system, but this must work and be controlled without power. There is a question of filters or scrubbers in the vent system: these need to be such that they do not block due to solids being carried. Ideally any vent system should deal with any large amounts of hydrogen, as at Fukushima, and have minimum potential to spread radioactivity outside the plant. The [Three Mile Island accident](http://www.world-nuclear.org/info/inf36.html) in 1979 demonstrated the importance of the inherent safety features. Despite the fact that about half of the reactor core melted, radionuclides released from the melted fuel mostly plated out on the inside of the plant or dissolved in condensing steam. The containment building which housed the reactor further prevented any significant release of radioactivity. The accident was attributed to mechanical failure and operator confusion. The reactor's other protection systems also functioned as designed. The emergency core cooling system would have prevented any damage to the reactor but for the intervention of the operators. Investigations following the accident led to a new focus on the human factors in nuclear safety. No major design changes were called for in western reactors, but controls and instrumentation were improved significantly and operator training was overhauled. A 2007 US Department of Energy (DOE) [Human Performance Handbook](http://www.hss.doe.gov/sesa/corporatesafety/hpc/docs/Ch1_IntroHPI.pdf) notes that "The aviation industry, medicine, the commercial nuclear power industry, the US Navy, DOE and its contractors, and other high-risk, technologically complex industries have adopted human performance principles, concepts, and practices to consciously reduce human error and bolster defences in order to reduce accidents and mishaps." "About 80 percent of all events are attributed to human error. In some industries, this number is closer to 90 percent. Roughly 20 percent of occurrences involve equipment failures. When the 80 percent human error is broken down further, it reveals that the majority of errors associated with events stem from latent organizational weaknesses (perpetrated by humans in the past that lie dormant in the system), whereas about 30 percent are caused by the individual worker touching the equipment and systems in the facility. Clearly, focusing efforts on reducing human error will reduce the likelihood of occurrences and events." Following the Fukushima accident the focus has been on the organisational weaknesses which increase the likelihood of human error. By way of contrast to western safety engineering, the Chernobyl reactor did not have a containment structure like those used in the West or in post-1980 Soviet designs. The main positive outcome of this accident for the industry was the formation of the World Association of Nuclear Operators (WANO), building on the US precedent. At [Fukushima Daiichi in March 2011](http://http:/www.world-nuclear.org/info/fukushima_accident_inf129.html) the three operating reactors shut down automatically, and were being cooled as designed by the normal residual heat removal system using power from the back-up generators, until the tsunami swamped them an hour later. The emergency core cooling systems then failed. Days later, a separate problem emerged as spent fuel ponds lost water. Detailed analysis of the accident continues, but the main results include more attention being given to siting criteria and the design of back-up power and post-shutdown cooling, as well as provision for venting the containment of that kind of reactor and other emergency management procedures. Nuclear plants have Severe Accident Mitigation Guidelines (SAMG, or in Japan: SAG), and most of these, including all those in the USA, address what should be done for accidents beyond design basis, and where several systems may be disabled. See section below. In 2007 the US NRC launched a research program to assess the possible consequences of a serious reactor accident. Its draft report was released nearly a year after the Fukushima accident had partly confirmed its findings. The State-of-the-Art Reactor Consequences Analysis (SOARCA) showed that a severe accident at a US nuclear power plant (PWR or BWR) would not be likely to cause any immediate deaths, and the risks of fatal cancers would be vastly less than the general risks of cancer. SOARCA's main conclusions fall into three areas: how a reactor accident progresses; how existing systems and emergency measures can affect an accident's outcome; and how an accident would affect the public's health. The principal conclusion is that existing resources and procedures can stop an accident, slow it down or reduce its impact before it can affect the public, but even if accidents proceed without such mitigation they take much longer to happen and release much less radioactive material than earlier analyses suggested. This was borne out at Fukushima, where there was ample time for evacuation – 3 days - before any significant radioactive releases. A different safety philosophy: Early Soviet-designed reactors The April 1986 disaster at the [Chernobyl nuclear power plant](http://www.world-nuclear.org/info/chernobyl/inf07.html) in the Ukraine was the result of major design deficiencies in the RBMK type of reactor, the violation of operating procedures and the absence of a safety culture. One peculiar feature of the RBMK design was that coolant failure could lead to a strong increase in power output from the fission process ( positive void coefficient). However, this was not the prime cause of the Chernobyl accident. The accident destroyed the reactor and killed 56 people, 28 of whom died within weeks from radiation exposure. It also caused radiation sickness in a further 200-300 staff and firefighters, and contaminated large areas of Belarus, Ukraine, Russia and beyond. It is estimated that at least 5% of the total radioactive material in the Chernobyl-4 reactor core was released from the plant, due to the lack of any containment structure. Most of this was deposited as dust close by. Some was carried by wind over a wide area. About 130,000 people received significant [radiation doses](http://www.world-nuclear.org/info/inf05.html) (i.e. above internationally accepted ICRP limits) and continue to be monitored. About 4000 cases of thyroid cancer in children have been linked to the accident. Most of these were curable, though about nine were fatal. No increase in leukaemia or other cancers have yet shown up, but some is expected. The World Health Organisation is closely monitoring most of those affected. The Chernobyl accident was a unique event and the only time in the history of commercial nuclear power that radiation-related fatalities occurred. The destroyed unit 4 was enclosed in a concrete shelter which now requires remedial work. An OECD expert report on it concluded that "the Chernobyl accident has not brought to light any new, previously unknown phenomena or safety issues that are not resolved or otherwise covered by current reactor safety programs for commercial power reactors in OECD Member countries. In other words, the concept of 'defence in depth' was conspicuous by its absence, and tragically shown to be vitally important. Apart from the RBMK reactor design, an early Russian PWR design, the VVER-440/V-230, gave rise to concerns in Europe, and a program was initiated to close these down as a condition of EU accession, along with Lithuania’s two RBMK units. See related papers on [Early Soviet Reactors and EU Accession](http://http:/www.world-nuclear.org/info/inf44.html), and [RBMK Reactors](http://http:/www.world-nuclear.org/info/inf31.html). A broader picture - other past accidents There have been a number of accidents in experimental reactors and in one military plutonium-producing reactor, including a number of core melts, but none of these has resulted in loss of life outside the actual plant, or long-term environmental contamination. Elsewhere (Safety of Nuclear Power info paper appendix) we tabulate these, along with the most serious commercial plant accidents. The list of ten probably corresponds to incidents rating 4 or higher on today’s International Nuclear Event Scale (Table 4). All except Browns Ferry and Vandellos involved damage to or malfunction of the reactor core. At Browns Ferry a fire damaged control cables and resulted in an 18-month shutdown for repairs; at Vandellos a turbine fire made the 17-year old plant uneconomic to repair. **Mention should be made of the accident to the US Fermi-1 prototype fast breeder reactor near Detroit in 1966. Due to a blockage in coolant flow, some of the fuel melted. However no radiation was released off-site and no-one was injured.** The reactor was repaired and restarted but closed down in 1972. The well-publicized criticality accident at Tokai Mura, Japan, in 1999 was at a fuel preparation plant for experimental reactors, and killed two workers from radiation exposure. Many other such criticality accidents have occurred, some fatal, and practically all in military facilities prior to 1980. In an uncontained reactor accident such as at Windscale (a military facility) in 1957 and at Chernobyl in 1986, (and to some extent: Fukushima in 2011,) the principal health hazard is from the spread of radioactive materials, notably volatile fission products such as iodine-131 and caesium-137. These are biologically active, so that if consumed in food, they tend to stay in organs of the body. I-131 has a half-life of 8 days, so is a hazard for around the first month, (and apparently gave rise to the thyroid cancers after the Chernobyl accident). Caesium-137 has a half-life of 30 years, and is therefore potentially a long-term contaminant of pastures and crops. In addition to these, there is caesium-134 which has a half-life of about two years. While measures can be taken to limit human uptake of I-131, (evacuation of area for several weeks, iodide tablets), high levels of radioactive caesium can preclude food production from affected land for a long time. Other radioactive materials in a reactor core have been shown to be less of a problem because they are either not volatile (strontium, transuranic elements) or not biologically active (tellurium-132, xenon-133). **Accidents in any field of technology provide valuable knowledge enabling incremental improvement in safety beyond the original engineering. Cars and airliners are the most obvious examples of this, but the chemical and oil industries can provide even stronger evidence. Civil nuclear power has greatly improved its safety in both engineering and operation over its 55 years of experience with very few accidents and major incidents to spur that improvement**. The Fukushima Daiichi accident is the first since Three Mile Island in 1979 which will have significant implications, at least for older plants.

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#### Advantage one is Prolif –

#### Inevitable interest makes nuclear expansion uniquely dangerous now

Banks and Ebinger, 11 [John P, Charles K, John is a fellow with the Energy Security Initiative at the Brookings Institution, Charles is senior fellow and director of the Energy Security Initiative at the Brookings Institution, “Introduction: Planning a Responsible Nuclear Future” in “Business and Nonproliferation”, p. googlebooks]

Nuclear energy is a twentieth-century innovation but until recently has not spread beyond a relatively small number 0F industrialized nations (see maps on pages 4 5). All this is about to change. With global electricity demand increasing dramatically, greenhouse gas emissions, and energy security becoming national priorities, developed and developing countries alike are reexamining nuclear energy as a means of providing a reliable E scalable source of low-carbon power. The International Energy Agency (IEA) projects that global electricity demand will increase 2.2 percent a year to 2035, with about 80 percent of that growth occurring in emerging economies outside the Organization for Economic Cooperation £ Development (OECD).' Even if new policy initiatives are introduced to lower carbon dioxide (CO2) emissions Q combat global climate change, global energy-related CO2 emissions are expected to increase 21 percent between 2008 2035.1 Emerging market economies account For all of this projected increase in emissions. In the face of rising prices and increasing volatility in the oil market, many of these economies have shifted their attention to nuclear energy as a means of reducing dependence on oil (often a major source of their power generation), improving their balance of payments, and bolstering national energy security.’ Currently, 440 reactors with a total capacity of 375 gigawatts (G\Wc) arc in operation worlclwicle.\* As of March 2011, 65 nuclear reactor units, with a total capacity of 63 G\Ve, are under construction.5 As of April 2011, 158 projects are also on order or planned and 326 proposed." These preparations For replacing or expanding reactor ﬂeets Q For new entries to the marketplace follow a decades-long lull in construction suggest a “nuclear renaissance” has begun. \Y/hile “renaissance” implies a revival or return to a better time. the global expansion of nuclear energy in the coming decades will differ in several resects from the way civilian nuclear power developed between the late 1950s mid-19805. First, the scope and pace of this new deployment could be signiﬁcantly larger than in previous periods of expansion: some recent analyses put installed nuclear capacity up at 550—850 G\Ve by 2035. depending on assumptions about the implementation of low-carbon energy policiesf In IEA projections, a 50 per- cent cut in energy-related CO, emissions by 2050 would require global capacity to reach 1,200 G\Ve, a net addition of 30 G\Ve each year over the next forty years.“ To put this ﬁgure into perspective, during the period of nuclear p0wer’s most rapid expansion (1981-90). capacity increased by only 20 G\Ve a year, slowing to an annual average of 4 G\X/e from 1991 to 2006." To achieve large- scale reductions in energy—related CO: emissions, nuclear capacity must there- lore grow not only faster but also For several decades longer than during nuclear energy's previous “golden age." (As the preface indicates, safety concerns arising in the aftermath ofthe Fukushima accident will slow or scale back nuclear power expansion globally in the short term. At the same time, the longer-term impact of Fukushima on global nuclear power expansion will be less adverse, especially in emerging market countries.) Also different today is the number of countries seeking to build their ﬁrst nuclear power reactor. Some sixty-ﬁve countries have expressed interest in or are actively planning for nuclear power."' As the International Atomic Energy Agency (IAEA) points out, however, most of these countries are merely “con- sidering” the range of issues involved in nuclear power development. Many of them cannot realistically afford the large costs associated with civilian nuclear power programs. According to some analyses, countries with a GDP ofless than $50 billion could not spend several billion dollars building a reactor." ln addi- tion, many aspirant countries still lack the electricity grids required For nuclear power: electricity systems with a capacity below l0 G\Ve are unlikely to be able to accommodate a nuclear reactor.“ Some countries could address this issue by expanding electricity interconnections with neighboring states or developing ower export arrangements; however, these alternatives are not widely available in any case would take time to implement. At the same time, a number of countries have credible plans to become new nuclear energy states (NNES). The IAEA has indicated that ten to twenty-ﬁve countries might begin operating their ﬁrst plants by 2030, whereas since Cher- nobyl only thrce—China, Mexico, Romania—havc brought nuclear plants online for the ﬁrst time.” The following list shows the stages of progress of eleven emerging market countries in their ellorts to develop a civilian nuclear energy programz“ —Power reactors under construction: Iran.“ —Contracts signed, legal regulatory infrastructure well developed: United Arab Emirates (UAE), Turkey. —Committed plans, legal Q regulatory infrastructure developing: Vietnam, jordan. —\Well-developed plans but commitment pending: Thailand. Indonesia. Egypt, Kazakhstan. —Developing plans: Saudi Arabia, Malaysia. Emerging market nations entertaining the construction of new nuclear power capacity lace several critical issues. Domestically, each must establish strong institutions and viable regulatory frameworks addressing health, safety, prolif- eration, environmental concerns while ensuring that adequate human ﬁnancial resources are available for these tasks. Even if a state is willing to buy a nuclear reactor on a “turnkey” basis (paying For an outside operator to build Q run the system), it must still train its own nationals in these various respects Q establish a strong academic industrial culture in all aspects of commercial nuclear operations in order to achieve a sound, sustainable program. The NNES will need to build these capabilities in a sufficient timely manner. New States One of the biggest challenges in any expansion of the civilian nuclear sector is that of maintaining and strengthening the global regime for nuclear proliferation. The changing geopolitical J security environment, combined with the political instability of many regions countries that aspire to develop civilian nuclear reactor technology, has already raised proliferation concerns. Nuclear power reactors could become attractive targets for terrorists, who might also seek access to ﬁssile material for radiological dispersal devices (“dirty bombs”) or for nuclear weapons. With such materials more widely available, the proliferation risks could mount. As commercial enrichment and recycling programs multiply, countries may be tempted also to develop latent nuclear weapons capabilities, especially if they aspire to attain regional predominance, international standing, or the capabilities of regional rivals. An expansion of nuclear energy could further tax an already stressed proliferation regime. In light ofArticle IV of the Nuclear Treaty (NPT), wl1icl1 states that the treat shall not aﬁect the “inalienable right . . . to develop research, production duse of nuclear energy For peaceful purposes without discrimination . . . the right to partici ate in, the fullest possible exchange of equipment, materials H scientiﬁc ii technological information For the peaceful uses olinuclear energy, ” some nations are considering acquisition of fuel cycle capabilities as a way to avoid further dependence on foreign suppliers when they develop nuclear power.“ The NPT contains no provisions to restrict acquisition of such capabilities, although members of the Nuclear Suppliers Group (a voluntary group of nations that restricts nuclear exports) have long practiced restraint on technology transfers of sensitive components of the Fuel cycle. A sharp increase in the demand for nuclear fuel could enhance the commercial attractiveness of uranium enrichment reprocessing, enticing new entrants into the market." Nations with large uranium resources might seek to add value to their uranium exports by moving further up the chain of produc- tion or by expanding current capabilities (Australia, Canada, Kazakhstan, South Africa have all discussed this option recently). Even if the high cost of Fuel cycle activities proves to be a disincentive to their development, the NNES— especially in emerging markets—may consider Fuel supply security exercis- ing sovereign rights under Article IV of the NPT more relevant than economic drivers in their decisions about enrichment or reprocessing.“ With governments playing an increasing role in securing and meeting nuclear contracts, political motivations might also enter into assessments of the nuclear capabilities neces- sary for recipient countries. The great danger in the race to build out new capacity is that some new players may not take proliferation concerns as seriously as existing service providers. To address these issues, there has been a reinvigorated discussion of multilat- eral nuclear approaches (MN/\s). M NAs establish a framework to safeguard Arti- cle IV rights, speciﬁcally by limiting the diffusion ofsensitive nuclear materials E technologies while concurrently guaranteeing long-term supply of nuclear fuel to civilian nuclear power programs. Some steps in this direction include two recently approved fuel banks: the Russian-backed lnternational Uranium Enrich- ment Center in Angarsk the ME/\ Nuclear Threat Initiative Fuel Bank.” The institutional challenges to the regime are compounded both by the actions of rogue states such as Iran’s clandestine nuclear program and North Korea’s nuclear weapons testing Q new uranium enrichment pro- gram, Q by non-state activities such as the operations ofblack market nuclear networks arranged by Pakistani scientist A. Khan. Conﬁdence in the regime’s ability to respond to resolve proliferation threats has thus fallen. New technologies may put further stress on the system. Particularly worrying are the expansion of centrifuge technology, commercialization of the laser enrichment process, development and deployment of next-generation reprocessing techniques that require advanced safeguards, and the potential spread of fast reactors. Although the impact of these dynamics is tlifﬁcult to foresee, the proliferation regime needs to keep pace with the rapidly changing, complex nuclear market, especially those developments activities that facilitate the expansion of uranium enrichment and spent fuel reprocessing. This is a major challenge for a regime already under stress.

#### Plan prevents global prolif and solidifies leadership

**Bengelsdorf and McGoldrick**, **07** [currently a Principal with the consulting firm of Bengelsdorf, McGoldrick, and Associates, held numerous senior positions in the U.S. government, including the Energy Department and its predecessor agencies, the State Department, and the U.S. Mission to the IAEA. Among his appointments, he served as the director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs. Throughout his career, Mr. Bengelsdorf contributed significantly to the development and implementation of U.S. international fuel cycle and nonproliferation policies, having participated in several White House and National Security Council studies. He was involved in the negotiation of numerous bilateral and multilateral nuclear and nonproliferation agreements, including the development of full-scope IAEA safeguards (INFCIRC/153) to implement the Nuclear, THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY A White Paper Presented by the American Council on Global Nuclear Competitiveness May 2007, http://www.nuclearcompetitiveness.org/images/COUNCIL\_WHITE\_PAPER\_Final.pdf]

The health of the U.S. civil nuclear infrastructure can have an important bearing in a variety of ways on the ability of the United States to advance its nonproliferation objectives. During the Atoms for Peace Program and until the 1970s, the U.S. was the dominant supplier in the international commercial nuclear power market, and it exercised a strong leadership role in shaping the global nonproliferation regime. In those early days, the U.S. also had what was essentially a monopoly in the nuclear fuel supply market. This capability, among others, allowed the U.S. to promote the widespread acceptance of nonproliferation norms and restraints, including international safeguards and physical protection measures, and, most notably, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The United States concluded agreements for cooperation in peaceful nuclear energy with other states, which require strict safeguards, physical protection and other nonproliferation controls on their civil nuclear programs. Today due to its political, military and economic position in the world, the United States continues to exercise great weight in nonproliferation matters. However, the ability of the United States to promote its nonproliferation objectives through peaceful nuclear cooperation with other countries has declined**.** The fact that no new nuclear power plant orders have been placed in over three decades has led to erosion in the capabilities of the U.S. civil nuclear infrastructure. Moreover, during the same period, the U.S. share of the global nuclear market has declined significantly, and several other countries have launched their own nuclear power programs and have become major international suppliers in their own right. It is highly significant that all but one of the U.S. nuclear power plant vendors and nuclear fuel designers and manufactures for light water reactors have now been acquired by their non-U.S. based competitors. Thus, while the U.S. remains a participant in the international market for commercial nuclear power, it no longer enjoys a dominant role as it did four decades ago. To the extent that U.S. nuclear plant vendors and nuclear fuel designers 2 and manufacturers are able to reassert themselves on a technical and commercial basis, opportunities for U.S. influence with respect to nuclear nonproliferation can be expected to increase. However, the fact that there are other suppliers that can now provide plants and nuclear fuel technology and services on a competitive commercial basis suggests that the U.S. will have to work especially hard to maintain and, in some cases, rebuild its nuclear infrastructure, if it wishes to exercise its influence in international nuclear affairs. The influence of the United States internationally could be **enhanced significantly** if the U.S. is able to achieve success in its Nuclear Power 2010 program and place several new orders in the next decade and beyond. There is a clear upsurge of interest in nuclear power in various parts of the world. As a consequence, if the U.S. aspires to participate in these programs and to shape them in ways that are most conducive to nonproliferation, it will need to promote the health and viability of the American nuclear infrastructure. Perhaps more importantly, if it wishes to exert a positive influence in shaping the nonproliferation policies of other countries, it can do so more effectively by being an active supplier to and partner in the evolution of those programs. Concurrent with the prospective growth in the use of nuclear power, the global nonproliferation regime is facing some direct assaults that are unprecedented in nature. International confidence in the effectiveness of nuclear export controls was shaken by the disclosures of the nuclear operations of A.Q. Khan. These developments underscore the importance of maintaining the greatest integrity and effectiveness of the nuclear export conditions applied by the major suppliers. They also underscore the importance of the U.S. maintaining effective policies to achieve these objectives. **Constructive** U.S. influence will be best achieved to the extent that the U.S. is perceived as a major **technological** leader, supplier and partner in the field of nuclear technology. As the sole superpower, the U.S. will have considerable, on-going influence on the international nonproliferation regime, regardless of how active and successful it is in the nuclear export market. However, the erosion of the U.S. nuclear infrastructure has begun to weaken the ability of the U.S. to participate actively in the international nuclear market. If the U.S. becomes more dependent on foreign nuclear suppliers or if it leaves the international 3 nuclear market to other suppliers, the ability of the U.S. to influence nonproliferation policy will diminish. It is, therefore, essential that the United States have vibrant nuclear reactor, enrichment services, and spent fuel storage and disposal industries that can not only meet the needs of U.S. utilities but will also enable the United States to promote effective safeguards and other nonproliferation controls through close peaceful nuclear cooperation with other countries. U.S. nuclear exports can be used to influence other states’ nuclear programs through the nonproliferation commitments that the U.S. requires. The U.S. has so-called consent rights over the enrichment, reprocessing and alteration in form or content of the nuclear materials that it has provided to other countries, as well as to the nuclear materials that are produced from the nuclear materials and equipment that the U.S. has supplied. Further, the ability of the U.S. to develop improved and advanced nuclear technologies will depend on its ability to provide consistent and vigorous support for nuclear R&D programs that will enjoy solid bipartisan political support in order that they can be sustained from one administration to another. As the U.S. Government expends taxpayer funds on the Nuclear Power 2010 program, the Global Nuclear Energy Partnership, the Generation IV initiative and other programs, it should consider the benefit to the U.S. industrial base and to U.S. non-proliferation posture as criteria in project design and source selection where possible. Finally, the ability of the United States to resolve its own difficulties in managing its spent fuel and nuclear wastes will be crucial to maintaining the **credibility** of the U.S. nuclear power program and will be vital to implementing important new nonproliferation **initiatives** designed to discourage the spread of sensitive nuclear facilities to other countries.

#### US leadership offsets dangerous tech

Ferguson, 10 [Dr. Charles D. Ferguson, President of the Federation of American Scientists, Adjunct Professor in the Security Studies Program at Georgetown University and Adjunct Lecturer in the National Security Studies Program at the Johns Hopkins University, May 19, 2010, Statement before the House Committee on Science and Technology for the hearing on Charting the Course for American Nuclear Technology: Evaluating the Department of Energy’s Nuclear Energy Research and Development Roadmap, <http://www.fas.org/press/_docs/05192010_Testimony_HouseScienceCommHearing%20.pdf>]

\*PHWR = pressurized heavy water reactor

The United States and several other countries have considerable experience in building and operating small and medium power reactors. The U.S. Navy, for example, has used small power reactors since the 1950s to provide propulsion and electrical power for submarines, aircraft carriers, and some other surface warships. China, France, Russia, and the United Kingdom have also developed nuclear powered naval vessels that use small reactors. Notably, Russia has deployed its KLT-40S and similarly designed small power reactors on icebreakers and has in recent years proposed building and selling barges that would carry these types of reactors for use in sea-side communities throughout the world. China has already exported small and medium power reactors. In 1991, China began building a reactor in Pakistan and started constructing a second reactor there in 2005. In the wake of the U.S.-India nuclear deal, Beijing has recently reached agreement with Islamabad to build two additional reactors rated at 650 MWe.2 One of the unintended consequences of more than 30 years of sanctions on India’s nuclear program is that India had concentrated its domestic nuclear industry on building small and medium power reactors based on Canadian pressurized heavy water technology, or Candu-type reactors. Pressurized heavy water reactors (PHWRs) pose proliferation concerns because they can be readily operated in a mode optimal for producing weapons-grade plutonium and can be refueled during power operations. Online refueling makes it exceedingly difficult to determine when refueling is occurring based solely on outside observations, for example, through satellite monitoring of the plant’s operations. Thus, the chances for potential diversion of fissile material increase. This scenario for misuse underscores the need for more frequent inspections of these facilities. But the limited resources of the International Atomic Energy Agency have resulted in a rate of inspections that are too infrequent to detect a diversion of a weapon’s worth of material.3 The opening of the international nuclear market to India may lead to further spread of PHWR technologies to more states. For example, last year, the Nuclear Power Corporation of India, Ltd. (NPCIL) expressed interest in selling PHWRs to Malaysia.4 NPCIL is the only global manufacturer of 220 MWe PHWRs. New Delhi favors South-to-South cooperation; consequently developing states in Southeast Asia, sub-Saharan Africa, and South America could become recipients of these technologies in the coming years to next few decades. Many of these countries would opt for small and medium power reactors because their electrical grids do not presently have the capacity to support large power reactors and they would likely not have the financial ability to purchase large reactors. What are the implications for the United States of Chinese and Indian efforts to sell small and medium power reactors? Because China and India already have the manufacturing and marketing capability for these reactors, the United States faces an economically competitive disadvantage. Because the United States has yet to license such reactors for domestic use, it has placed itself at an additional market disadvantage. By the time the United States has licensed such reactors, China and India as well as other competitors may have established a strong hold on this emerging market. The U.S. Nuclear Regulatory Commission cautioned on December 15, 2008 that the “licensing of new, small modular reactors is not just around the corner. The NRC’s attention and resources now are focused on the large-scale reactors being proposed to serve millions of Americans, rather than smaller devices with both limited power production and possible industrial process applications.” The NRC’s statement further underscored that “examining proposals for radically different technology will likely require an exhaustive review” ... before “such time as there is a formal proposal, the NRC will, as directed by Congress, continue to devote the majority of its resources to addressing the current technology base.”6 Earlier this year, the NRC devoted consideration to presentations on small modular reactors from the Nuclear Energy Institute, the Department of Energy, and the Rural Electric Cooperative Association among other stakeholders.7 At least seven vendors have proposed that their designs receive attention from the NRC.8 Given the differences in design philosophy among these vendors and the fact that none of these designs have penetrated the commercial market, it is too soon to tell which, if any, will emerge as market champions. Nonetheless, because of the early stage in development, the United States has an opportunity to state clearly the criteria for successful use of SMRs. But because of the head start of China and India, the United States should **not procrastinate** and should take a leadership role in setting the standards for safe, secure, and proliferation-resistant SMRs that can compete in the market. Several years ago, the United States sponsored assessments to determine these criteria.9 While the Platonic ideal for small modular reactors will likely not be realized, it is worth specifying what such an SMR would be. N. W. Brown and J. A. Hasberger of the Lawrence Livermore National Laboratory assessed that reactors in developing countries must: • “achieve reliably safe operation with a minimum of maintenance and supporting infrastructure; • offer economic competitiveness with alternative energy sources available to the candidate sites; • demonstrate significant improvements in proliferation resistance relative to existing reactor systems.”10 Pointing to the available technologies at that time from Argentina, China, and Russia, they determined that “these countries tend to focus on the development **of the reactor** without integrated considerations of the overall fuel cycle, proliferation, or waste issues.” They emphasized that what is required for successful development of an SMR is “a comprehensive systems approach that considers all aspects of manufacturing, transportation, operation, and ultimate disposal.” Considering proliferation resistance, their preferred approach is to eliminate the need for on-site refueling of the reactor and to provide for waste disposal away from the client country. By eliminating on-site refueling the recipient country would not need to access the reactor core, where plutonium—a weapons-usable material—resides. By removing the reactor core after the end of service life, the recipient country would not have access to fissile material contained in the used fuel. Both of these proposed criteria present technical and political challenges.

#### And, LFTR reactors are key – in situ reprocessing checks fissile diversion

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

\*LFTR = liquid fluoride thorium reactor

IN REPORTING ON THE THORIUM POWER MOVEMENT, I heard plenty of reasons why it would never work. After a year or so I classified them into three categories: market barriers, challenges related to waste and proliferation, and what I came to call the traditionalist argument. The market-based argument is simple: the nuclear power industry has a fuel today that is abundant and inexpensive. Why should it switch to a new, relatively unproven fuel? These assumptions are faulty (uranium may well not be inexpensive and plentiful much longer—see the comments of Srikumar Banerjee, chair of India’s Atomic Energy Commission, from chapter 7). More important, this argument does not take into account the broader costs and risks of uranium-based nuclear power, which have been highlighted by the Fukushima-Daiichi accident. There’s little chance of nuclear power’s fulfilling its promise until those costs are driven down—by shifting to thorium power. The waste and proliferation issues are more complicated, and I will break them down into four elements.“ In distilled form they sum up the objections to thorium from both the nuclear establishment and antinuclear groups. 1. The use of enriched uranium or plutonium in thorium fuel to **ignite the fission** reaction carries proliferation risks, and U-233 is as useful as Pu-239 for making nuclear bombs. This is the central claim of those who dismiss thorium’s prospects for reducing the nuclear waste stream: Solid-fuel thorium reactors produce both U233 (the fissile daughter element of Th232) and plutonium, so what’s the difference? What’s more, thorium reactors require lowenriched uranium or plutonium to initiate the fission reaction, thus creating more material that can be refined into bombs. The kernel of truth here is that the U233 (and thus the plutonium as well) created in the transmutation of thorium is contaminated by U232, one of the nastiest isotopes in the universe. With a half-life of less than 70 years, U-232 decays into the radioisotopes bismuth-212 and thallium-208, which emit intense gamma rays that make it very, very hard to handle and transport (not to mention reprocess) and that would very likely destroy the electronics of any weapon into which they were built. Theoretically, it's possible to make a bomb with U-233, but plutonium is much easier to make and does not come with the problematic U-232. Militaries will always opt for plutonium and U235, because they can't afford to expose their personnel to the deadly risks of U232. As for terrorists, they'd be better off simply buying natural uranium on the open market and finding a way to enrich it. The United States reportedly tested bombs with U-233 cores in the late 1950s, but no country has ever included it as a material as a part of its nuclear weapons program. It's useless even for the most zealous of hypothetical suicide bombers, because they’d probably never reach their target. 2. Most proposed thorium reactors require reprocessing to separate out the U-233 for use in fresh fuel. As with conventional uranium power plants that include reprocessing, bomb-making material is separated out, making it vulnerable to theft or diversion. **This is a tired canard**. Never mind that every nuclear fuel cycle currently in production or contemplated generates “bomb-making material” -- this statement ignores the **realities of weapons building**. Most Gen IV designs described in this chapter involve fuel recycling; indeed, as the Peterson report stated, recycling is critical to the future of nuclear power. To be sure, reprocessing spent fuel rods from a solid fuel thorium reactor is not a simple matter, whether you’re making bombs or new fuel. But it’s important to note that, as with all these arguments, external reprocessing is necessary **only for solid fuel** reactors, not LFTRs. Alone among advanced reactor designs, LFTRs have the capacity to reprocess the fuel **in the reactor** building itself, while the reactor is operating. There’s **no opportunity** for diversion unless you raid the entire plant, shut down the reactor, and figure out a way to separate and abscond with the weaponizable isotopes. Good luck with that. 3. The claim that radioactive waste from thorium reactors creates waste that would have to be isolated from the environment for only 500 years, whereas irradiated uranium-only fuel remains dangerous for hundreds of thousands of years, is false. Thorium-based reactors create long-lived fission products like technetium-99 (its half-life is more than 200,000 years), and thorium- 232 is extremely long lived (its half-life is 14 billion years). This argument ignores the larger context. The volume of fission products from thorium-based solid fuel reactors is about a tenth of that from conventional reactors. What's more, in small amounts, many of these fission products have become common in modern life. Technetium-99, for example, is powerful stuff, worthy of respectful treatment; it’s also commonly used, in a slightly altered form, in medical imaging procedures. Millions of patients ingest it every day without significant risk. The amounts of technetium-99 produced in solid-fuel thorium reactors would be negligible; in LFTRs it would be processed off along with other fission products and largely recycled. Some geological storage will be required, but in general waste from LFTRs decays to safe, stable states within a few hundred years, far less than the millennia required for the by-products of uranium reactors. As for Th-232, it's long lived but safe. The longerlived a radioactive element is, the lower its radioactivity, with its very long half-life, Th-232 is an exceedingly weak producer of radiation. It is so common that it's found in small amounts in virtually all rock, soil, and water. You could sleep with it under your pillow and suffer no ill effects. 4. Reprocessing of thorium fuel cycles has not been successful because uranium-232 is created along with uranium-233. U-232, which has a halflife of about 70 years, is extremely radioactive and is therefore quite dangerous in small quantities. U-232 is indeed extremely radioactive, but its brief half-life means that in less than a century half of it will have decayed to a stable form. Because isotopes decay at a geometric rate (50 percent of half of the original material, or one-quarter of the original, is still radioactive after another 70 years, then one-eighth, one-sixteenth, and so on), the decrease in radioactivity drops off quickly. Many, many hazardous materials are put in storage for centuries. We do not object to them. To summarize, the most common objections to thorium power from the perspective of radioactive waste and the proliferation of nuclear weapons are inflated for solid fuel reactors, and they simply do not apply to LFTRs. That leaves the traditionalist argument, which essentially echoes Milton Shaw and the WASH-1222 report from 1972: It can’t be done because it has never been done before. When I heard this brand of defeatism, it always came from someone with a vested interest in the current nuclear power establishment. I’ll explore the traditionalist argument in more detail in the final pages of this book.

#### Unmitigated tech breakout causes runaway prolif and nuclear war

Sokolski 9 [Henry Sokolski, Executive Director of the Nonproliferation Policy Education Center, 6/1/2009, Avoiding a Nuclear Crowd, http://www.hoover.org/publications/policy-review/article/5534]

Finally, several new nuclear weapons contenders are also likely to emerge in the next two to three decades. Among these might be Japan, North Korea, South Korea, Taiwan, Iran, Algeria, Brazil (which is developing a nuclear submarine and the uranium to fuel it), Argentina, and possibly Saudi Arabia (courtesy of weapons leased to it by Pakistan or China), Egypt, Syria, and Turkey. All of these states have either voiced a desire to acquire nuclear weapons or tried to do so previously and have one or more of the following: A nuclear power program, a large research reactor, or plans to build a large power reactor by 2030. With a large reactor program inevitably comes a large number of foreign nuclear experts (who are exceedingly difficult to track and identify) and extensive training, which is certain to include nuclear fuel making.19 Thus, it will be much more difficult to know when and if a state is acquiring nuclear weapons (covertly or overtly) and far more dangerous nuclear technology and materials will be available to terrorists than would otherwise. Bottom line: As more states bring large reactors on line more will become nuclear-weapons-ready — i.e., they could come within months of acquiring nuclear weapons if they chose to do so.20 As for nuclear safeguards keeping apace, neither the iaea’s nuclear inspection system (even under the most optimal conditions) nor technical trends in nuclear fuel making (e.g., silex laser enrichment, centrifuges, new South African aps enrichment techniques, filtering technology, and crude radiochemistry plants, which are making successful, small, affordable, covert fuel manufacturing even more likely)21 afford much cause for optimism. This brave new nuclear world will stir existing security alliance relations more than it will settle them: In the case of states such as Japan, South Korea, and Turkey, it could prompt key allies to go ballistic or nuclear on their own. Nuclear 1914 At a minimum, such developments will be a departure from whatever stability existed during the Cold War. After World War II, there was a clear subordination of nations to one or another of the two superpowers’ strong alliance systems — the U.S.-led free world and the Russian-Chinese led Communist Bloc. The net effect was relative peace with only small, nonindustrial wars. This alliance tension and system, however, no longer exist. Instead, we now have one superpower, the United States, that is capable of overthrowing small nations unilaterally with conventional arms alone, associated with a relatively weak alliance system ( nato) that includes two European nuclear powers (France and the uk). nato is increasingly integrating its nuclear targeting policies. The U.S. also has retained its security allies in Asia (Japan, Australia, and South Korea) but has seen the emergence of an increasing number of nuclear or nuclear-weapon-armed or -ready states. So far, the U.S. has tried to cope with independent nuclear powers by making them “strategic partners” (e.g., India and Russia), nato nuclear allies (France and the uk), “non-nato allies” (e.g., Israel and Pakistan), and strategic stakeholders (China); or by fudging if a nation actually has attained full nuclear status (e.g., Iran or North Korea, which, we insist, will either not get nuclear weapons or will give them up). In this world, every nuclear power center (our European nuclear nato allies), the U.S., Russia, China, Israel, India, and Pakistan could have significant diplomatic security relations or ties with one another but none of these ties is viewed by Washington (and, one hopes, by no one else) as being as important as the ties between Washington and each of these nuclear-armed entities (see Figure 3). There are limits, however, to what this approach can accomplish. Such a weak alliance system, with its expanding set of loose affiliations, risks becoming analogous to the international system that failed to contain offensive actions prior to World War I. Unlike 1914, there is no power today that can rival the projection of U.S. conventional forces anywhere on the globe. But in a world with an increasing number of nuclear-armed or nuclear-ready states, this may not matter as much as we think. In such a world, the actions of just one or two states or groups that might threaten to disrupt or overthrow a nuclear weapons state could check U.S. influence or ignite a war Washington could have difficulty containing. No amount of military science or tactics could assure that the U.S. could disarm or neutralize such threatening or unstable nuclear states.22 Nor could diplomats or our intelligence services be relied upon to keep up to date on what each of these governments would be likely to do in such a crisis (see graphic below): Combine these proliferation trends with the others noted above and one could easily create the perfect nuclear storm: Small differences between nuclear competitors that would put all actors on edge; an overhang of nuclear materials that could be called upon to break out or significantly ramp up existing nuclear deployments; and a variety of potential new nuclear actors developing weapons options in the wings. In such a setting, the military and nuclear rivalries between states could easily be much more intense than before. Certainly each nuclear state’s military would place an even higher premium than before on being able to weaponize its military and civilian surpluses quickly, to deploy forces that are survivable, and to have forces that can get to their targets and destroy them with high levels of probability. The advanced military states will also be even more inclined to develop and deploy enhanced air and missile defenses and long-range, precision guidance munitions, and to develop a variety of preventative and preemptive war options. Certainly, in such a world, relations between states could become far less stable. Relatively small developments — e.g., Russian support for sympathetic near-abroad provinces; Pakistani-inspired terrorist strikes in India, such as those experienced recently in Mumbai; new Indian flanking activities in Iran near Pakistan; Chinese weapons developments or moves regarding Taiwan; state-sponsored assassination attempts of key figures in the Middle East or South West Asia, etc. — could easily prompt nuclear weapons deployments with “strategic” consequences (arms races, strategic miscues, and even nuclear war). As Herman Kahn once noted, in such a world “every quarrel or difference of opinion may lead to violence of a kind quite different from what is possible today.”23 In short, we may soon see a future that neither the proponents of nuclear abolition, nor their critics, would ever want. None of this, however, is inevitable.

#### Continued prolif ensures global war

Heisbourg 12—chairman of the council of the Geneva Centre for Security Policy and of the London-based International Institute for Strategic Studies (Francois, 3/4/12, “NUCLEAR PROLIFERATION – LOOKING BACK, THINKING AHEAD: HOW BAD WOULD THE FURTHER SPREAD OF NUCLEAR WEAPONS BE?,” http://www.npolicy.org/article\_file/Nuclear\_Proliferation\_-\_Looking\_Back\_Thinking\_Ahead\_How\_Bad\_Would\_the\_Further\_Spread\_of\_Nuclear\_Weapons\_Be.pdf, RBatra)

The problem with this reassuring reading of the past is that it is not entirely true. Yes, the NPT had a major material effect by gradually making non nuclear the new normal. Yes again, defense guarantees by the US weaned Germany, Italy (13), South Korea, Taiwan and even neutral Sweden away from the nuclear road, followed by the US-French-British assurances to post-Soviet Ukraine. Yes too, various levels of coercion worked in Iraq, Libya and Syria. But no, the practice of even the most ‘classical’ bilateral deterrence was not nearly as reassuring as the mainstream narrative inherited from the Cold War would have it. Nor can we consider that our elements for empirical judgment as methodologically satisfactory in terms of their breadth and depth. These two negatives will be examined in turn.

Nuclear archives, as other sensitive governmental archives, open up usually after an interval of decades and even then with varying levels of culling and redaction. Even oral histories tend to follow this pattern, as ageing witnesses feel freer to speak up. Hence a paradox: when the Soviet- American nuclear confrontation was central to our lives and policies during the Cold War, we didn’t how bad things really where; now that we are beginning to know, there is little public interest given the disappearance of the East-West contest. Yet there are lessons of general interest which can be summarized as follows: 1) the Cuban missile crisis brought us much closer to the brink than the acute sense of danger which prevailed at the time, for reasons which are germane to the current situation: massive failures of intelligence on Soviet nuclear preparations and dispositions in Cuba, notably on tactical nukes and on the operational readiness of a number of IRBMs and their warheads; dysfunctional or imperfect command and control arrangements (notably vis à vis Soviet submarines), unintentionally mixed signals on each antagonist’s actions). These are effectively laid out in Michael Dobb’s book, “One Minute to Midnight”(14). 2) the safety and security of nuclear forces are subject to potentially calamitous procedural, technical or operational mishaps and miscalculations, somewhat along the lines of what applies to related endeavors (nuclear power and aerospace). Scott Sagan in his “Limits of Safety”(15) provides compelling research on the American Cold War experience. It would be interesting to have a similar treatment on the Soviet experience…Although it can be argued that today’s nuclear arsenals are much smaller and easier to manage reliable, and that the technology for their control has been vastly improved, several facts remain:

the US has continued to witness serious procedural lapses in the military nuclear arena (16); the de-emphasis of the importance of nuclear weapons in the US force structure is not conducive to treating them with the respect which is due to their destructive power; other nuclear powers do not necessarily benefit from the same technology and learning curves as the older nuclear states, and notably the US; cheek-to-jowl nuclear postures, which prevailed in the Cuban missile crisis and which help explain why World War III nearly occurred, and which characterize India and Pakistan today.

Despite the dearth of detail on Indian and Pakistani nuclear crisis management, we know that the stability of nuclear deterrence between India and Pakistan is by no means a given, with serious risks occurring on several occasions since the mid-1980s(17).

At another level of analysis, we have to recognize the limits of the database on which we ground our policies on nonproliferation. The nuclear age, in terms of operationally usable devices, began in 1945, less than seventy years, less than the age of an old man. The fact that there has been no accidental or deliberate nuclear use during that length of time is nearly twice as reassuring as the fact that it took more than thirty years (18) for a nuclear electricity generating plant to blow up, in the form of the Chernobyl disaster of 1986. But given the destructive potential of nuclear weapons, twice as much reassurance (in the form of no use of nuclear weapons for close to seventy years) is probably not good enough. Furthermore, the Chernobyl disaster involved the same sort of errors of judgment, procedural insufficiencies and crisis-mismanagement visible in Scott Sagan’s book, not only or even mainly, flawed design choices: inadvertence at work, in other words of the sort which could prevail in a time-sensitive, geographically constrained Indo- Pakistani or Middle Eastern conflict. Give it another seventy years to pass judgment?

The same empirical limits apply to the number of actors at play: we have simple bipolar (US-USSR/Russia or India/Pakistan) and complex bipolar (US/France/UK/NATO-Soviet Union/Russia) experience; we’ve had US-Soviet-Chinese or Sino- Indian-Pakistani tripolarity; and we’ve had a number of unipolar moments (one nuclear state vis à vis non-nuclear antagonists). But we mercifully have not had to deal with more complex strategic geometries –yet- in the Middle East or East Asia. We only know what we know, we don’t know what we don’t know.

A historical narrative which is not reassuring and an empirical record that is less than compelling need to inform the manner in which we approach further proliferation.

PROLIFERATION PUSH AND PULL

Ongoing proliferation differs from that of the first halfcentury of the nuclear era in three essential ways: on the demand side, the set of putative nuclear actors is largely focused in the most strategically stressed regions of the world; on the supply side, the actual or potential purveyors of proliferation are no longer principally the first, industrialized, generation of nuclear powers; the technology involved in proliferation is somewhat less demanding than it was during the first nuclear age. Taken together, these changes entail growing risks of nuclear use.

Demand is currently focusing on two regions, the Middle East and East Asia (broadly defined) and involves states and, potentially, non-state actors. In the Middle East, Iran’s nuclear program is the focus of the most intense concerns. A potential consequence in proliferation terms would be to lead regional rivals of Iran to acquire nuclear weapons in term: this concern was vividly in 2007 by the then President of France, Jacques Chirac (19) who specifically mentioned Egypt and Saudi Arabia. The likelihood of such a “proliferation **chain-reaction**” may have been increased by President Obama’s recent repudiation of containment as an option (20): short of Iran being persuaded or forced to abandon its nuclear ambitions, the neighboring states would presumably have to contemplate security options other than a Cold War style US defense guarantee. Given prior attempts by Iraq, Syria and Libya to become nuclear powers, the probability of a multipolar nuclear Middle East has to be rated as high in case Iran is perceived as having acquired a military nuclear capability. Beyond the Middle East, the possibility of civil war in nuclear-armed Pakistan leading to state failure and the possibility of nukes falling out of the hands of an effective central government. There are historical precedents for such a risk, most notably, but not only(21)in the wake of the collapse of the Soviet Union: timely and lasting action by outside powers, such as the US with the Nunn-Lugar initiative, and the successor states themselves has prevented fissile material from falling into unauthorized hands in significant quantities. Pakistan could pose similar problems in a singularly more hostile domestic environment. As things stand, non-state actors, such as post-Soviet mafiya bosses (interested in resale potential) or Al Qaeda (22) have sought, without apparent success, to benefit from opportunities arising from nuclear disorder in the former USSR and Central Asia. Mercifully, the price Al Qaeda was ready to pay was way below the going rate (upwards of hundreds of $million) for the sorts of services provided by the A.Q.Khan network (see below)to some of his clients.

Although North Korea’s nuclear ambitions appear to be both more self-centered and more containable than is the case for Iran, the possibility of state collapse in combination with regional rivalry leave no room for complacency.

More broadly we are facing the prospect of a multipolar nuclear Middle East, linked to an uncertain nuclear Pakistan already part of a nuclear South Asia tied via China to the Korean nexus in which nuclear America and Russia also have a stake. More broadly still, such a nuclear arc-of-crisis from the Mediterranean to the Sea of Japan, would presumably imply the breakdown of the NPT regime, or at least its reversion to the sort of status it had during the Seventies, when many of its currently significant members had not yet joined (23), unloosening both the demand and supply sides of proliferation.

On the supply side, “old style” proliferation relied on official cooperation between first-generation nuclear or nuclearizing powers, of which the Manhattan project was a forerunner (with American, British and Canadian national contributions and multinational scientific teams), followed inter alia by post-1956 French-Israeli, post-1958 US-UK, pre- 1958 USSR-China cooperation. If India relied heavily on the “unwitting cooperation” , notably on the part of Canada and the US involved in the Atoms for Peace CIRUS research reactor, Pakistan set up the first dedicated, broad spectrum, crossborder trading network to make up for the weakness of its limited industrial base. This import-focused organization thus went beyond traditional espionage-aided efforts (as practiced by the USSR during and after the Manhattan project) or case-by-case purloining or diversion of useful material on the global market (as practiced by Israeli operatives). Even before the Pakistani network had fulfilled its primary task of supplying the national program, it began its transformation into an export-oriented venture.

Libya, Iran, North Korea and a fourth country which remains officially unnamed became the main outlets of what became the world’s first private-sector (albeit government originated and ,presumably, supported)proliferation company which was only wound down after strong Western pressure on Pakistan after 9/11. Although the by-now richly documented A.Q.Khan network (24) appears to have ceased to function in its previous incarnation, it has powerfully demonstrated that there is an international market for proliferation which other operators can expect to exploit. Furthermore, budding, resource-weak nuclear powers have a strong incentive to cover the cost of their investment by selling or bartering their nuclear-related assets, including delivery systems. The fruits of state-tostate cooperation between Iran, North Korea and Pakistan are clearly apparent in the close-to-identical genealogy of their nuclear-capable ballistic missiles of the No- Dong/Ghauri/Shahab families displayed in military parades and test launches. Not all such cooperation consists of televised objects.

Even in the absence of game-changing breakthroughs, technical trends facilitate both demand and supply-side proliferation. For the time being, the plutonium route towards the bomb remains essentially as easy and as difficult as from the earliest years of the nuclear era. Provided a country runs a (difficult-to-hide) research or a power reactor from which low-irradiated fuel can be downloaded at will (such as CANDUtype natural uranium reactors), reprocessing is a comparatively straightforward and undemanding task. Forging and machining a multiple-isotope metal which is notorious for its numerous physical states and chemical toxicity is a substantial challenge, with the companion complications of devising a reliable implosion mechanism. Nuclear testing is highly desirable to establish confidence in the end-result. Opportunities for taking the plutonium-proliferation road may increase somewhat as new techniques (such as pyro-processing) come on stream. Developments in the enriched uranium field have been more substantial in facilitating proliferation. The development of lighter and more efficient centrifuges make it easier for a state to extract enriched uranium speedily in smaller and less visible facilities. Dealing with the resulting military-level HEU is a comparatively undemanding task. The long-heralded advent of industrially effective and reliable laser enrichment technology may eventually further increase ease of access. Downstream difficulties would still remain. Although implosion-mechanisms are not mandatory, they are desirable in order both to reduce the critical mass of U235 for a nuclear explosion and to make for a lighter and smaller more-readily deliverable weapons package.

In sum, incremental improvements increase the risk of proliferation. However, non-state actors are not yet, and will not be on the basis of known technical trends, in a position to master the various steps of the two existing military nuclear fuel cycles, which remain the monopoly of states. Nonstate actors would need the active complicity from (or from accomplices within) states, or benefit from the windfall of state collapse, to acquire a military nuclear capability. The threat of nuclear terrorism continues to be subordinated to developments involving state actors, a remark which is not meant to be reassuring since such developments (see above) are increasingly likely as proliferation spreads to new states and as state failure threatens in the ‘arc of proliferation’ extending from the Mediterranean to North-East Asia. Furthermore, non-state actors can be satisfied with levels of nuclear reliability and performance which states could not accept. A difficult-to-deliver or fizzle-prone nuclear device would not provide a state with the level of deterrence needed to shield it from pre-emptive or retaliatory action, whereas a terrorist group would not be seeking such immunity. A road or ship-delivered imperfect device, which would be closer to a radiological bomb than to a fully-fledged atomic weapon would provide its non-state owners with immense potential. The road to a non-state device does not need to be as well-paved.

NUCLEAR FUTURES

‘New’ lessons from a revisited past and current trends in nuclear proliferation, will tie into a number of characteristics of contemporary international relations with potentially destabilizing consequences, leading to an increasing likelihood of nuclear use. Four such characteristics will be singled out here both because of their relevance to nuclear crisis management and because of their growing role in the world system in the age of globalization:

- Strategic upsets

- Limits of imagination

- Unsustainable strains

- Radical aims

The 2008 French Defence and National Security White Paper (25) developed the concept of ‘ruptures stratégiques’ (strategic upsets) to describe the growing tendency of the world system to generate rapid, unexpected, morphing upsets of international security as a consequence of globalization broadly defined against the backdrop of urbanizing populations generating economic growth and environmental and resource constraints. In themselves, such upsets are not novel (see inter alia, a pandemic such as the Black Death in 1348-49, the Great Depression not to mention World Wars or indeed the major and benign strategic upset of 1989-1991) but the very nature of globalization and the relationship between human activity and the Earth’s ability to sustain them) mean more, and more frequent as well as more complex upsets. If this reading is correct –and the Great financial crisis, the Arab revolutions, the accession of China to superpower status can be mentioned as examples which followed the publication of the White paper- ,then the consequences in the nuclear arena will be twofold. First, nuclear doctrines and dispositions which were conceived under a set of circumstances (such as the Cold War or the India-Pakistan balance of power) may rapidly find themselves overtaken by events. For instance it is easier to demonstrate that US and Russian nuclear forces still visibly bear the imprint of their 1950s template than it is to demonstrate their optimal adaptation to post-post-Cold War requirements. Second, more challenges to international security and of a largely unforeseeable nature mean greater strains placed on the ability of nuclear powers to manage crises against the backdrop of their possession of nuclear weapons. In many, indeed most, cases, such ‘ruptures stratégiques’ will no doubt be handled with nuclear weapons appearing as irrelevant: hypothetical security consequences of an epidemic (such as the interhuman transmission of the H5N1 bird flu virus) or prospective conflicts resulting from climate change do not have prima facie nuclear aspects. But beyond the reminder that we don’t know that as a fact, the probability is, under the ‘rupture stratégique’ hypothesis, that there will be more occasions for putting all crisis management, including nuclear, to the test.

Human societies tend to lack the imagination to think through, and to act upon, what have become known as ‘black swan’ events (26): that which has never occurred (or which has happened very rarely and in a wholly different context) is deemed not be in the field of reality, and to which must be added eventualities which are denied because their consequences are to awful to contemplate. The extremes of human misconduct (the incredulity in the face of evidence of the Holocaust, the failure to imagine 9/11) bear testimony to this hard-wired trait of our species. This would not normally warrant mention as a factor of growing salience if not for the recession into time of the original and only use of nuclear weapons in August 1945. Non-use of nuclear weapons may be taken for granted rather than being an absolute taboo. Recent writing on the reputedly limited effects of the Hiroshima and Nagasaki bombs (27) may contribute to such a trend, in the name of reducing the legitimacy of nuclear weapons. Recent (and often compelling) historical accounts of the surrender of the Japanese Empire which downplay the role of the atomic bombings in comparison to early research can produce a similar effect, even if that may not have been the intention (28). However desirable it has been, the end of atmospheric nuclear testing (29) has removed for more than three decades the periodic reminders which such monstrous detonations made as to the uniquely destructive nature of nuclear weapons. There is a real and growing risk that we forget what was obvious to those who first described in 1941 the unique nature of yet-to-be produced nuclear weapons (30). The risk is no doubt higher in those states for which the history of World War II has little relevance and which have not had the will or the opportunity to wrestle at the time or ex post facto with the moral and strategic implications of the nuclear bombing of Japan in 1945.

Unsustainable strains are possibly the single most compelling feature of contemporary proliferation. Tight geographical constraints –with, for instance, New Delhi and Islamabad located within 300 miles of each other-; nuclear multipolarity against the backdrop of multiple, criss-crossing, sources of tension in the Middle East (as opposed to the relative simplicity of the US-Soviet confrontation); the existence of doctrines (such as India’s ‘cold start’) and force postures (such as Pakistan’s broadening array of battlefield nukes) which rest on the expectation of early use; the role of non-state actors as aggravating or triggering factors when they are perceived as operating with the connivance of an antagonist state ( in the past, the assassination of the Austrian Archduke in Sarajevo in 1914; in the future, Hezbollah operatives launching rockets with effect against Israel or Lashkar-e-Taiba commandos doing a ‘Bombay’ redux in India?) : individually or in combination, these factors test crisis management capabilities more severely than anything seen during the Cold War with the partial exception of the Cuban missile crisis. Even the overabundant battlefield nuclear arsenals in Cold War Central Europe, with their iffy weapons’ safety and security arrangements, were less of a challenge: the US and Soviet short-range nuclear weapons so deployed were not putting US and Soviet territory and capitals at risk.

It may be argued that these risk factors are known to potential protagonists and that they therefore will be led to avoid the sort of nuclear brinksmanship which characterized US and Soviet behavior during the Cold War in crises such as the Korean war, Berlin, Cuba or the Yom Kippur war. Unfortunately, the multiple nuclear crises between India and Pakistan demonstrate no such prudence, rather to the contrary. And were such restraint to feed into nuclear policy and crisis planning –along the lines of apparently greater US and Soviet nuclear caution from the mid-Seventies onwards-, the fact would remain that initial intent rarely resists the strains of a complex, multi-actor confrontation between inherently distrustful antagonists. It is also worth reflecting on the fact that during the 1980s, there was real and acute fear in Soviet ruling circles that the West was preparing an out-of-the-blue nuclear strike, a fear which in turn fed into Soviet policies and dispositions (31).

The Cold War was a set of crises and misunderstandings which came within a whisker of a nuclear holocaust; India and Pakistan’s nuclear standoff is deeply unstable not least as a result of the interaction with non-state actors; a multipolar nuclear Middle East would make the Cuban missile crisis look easy in comparison.

Great conflicts tend to occur when one or several of the antagonists views the status quo as sufficiently undesirable and/or unsustainable to prompt forceful pro-action. Notwithstanding widespread perceptions to the contrary, this was not the case of the USSR and the United States during the Cold War. The US had chosen a policy of containment, as opposed to roll-back, of the Soviet Empire within its limits established as a result of World War II. The Soviet Union seized targets of opportunity outside of its 1945 area of control but avoided direct confrontation with US forces. Messianic language from the USSR on the global victory of communism or from the US about the end of the Evil Empire did not take precedence over the prime Soviet concern of preserving the Warsaw Pact and the US pursuit of containment – and, no less crucially, their mutual confidence that they could achieve these aims without going to war one with the other.

No such generalization can be made about the Middle East, a region in which the very existence of a key state (Israel) is challenged while others have gone to war with each other (e.G.Iran-Iraq war, the Gulf War of 1990-1991), or are riven by deep internal conflicts. Actors such as Hezbollah, with its organic and functional links with Islamic Iran and Alawite Syria add to the complexities and dangers. Extreme views and actions vis à vis the strategic status quo are widely prevalent. Although the India-Pakistan relationship corresponds to something akin to the US-Soviet ‘adversarial partnership’, that does not apply to radical non-state actors prevalent in Pakistan with more or less tight links to that country’s military intelligence services (ISI, Inter-Services Intelligence). The potential for danger is compounded by the variety of such groups: the Pashtu-related Pakistani Taliban (TTP), Kashmiri-related groups, Jihadi militants from the core provinces of Punjab and Sind… Their common characteristics are extreme radicalism, high levels of operational proficiency, and shared enmity of India. Their potential for triggering a conflict between the two countries is substantial, above and beyond the intentions of government officials.

#### Federal action is key to reverse industry decline and influence reactor adoption

Wallace and Williams, 12 [Michael, Senior Adviser, U.S. Nuclear Energy Project, Sarah, CSIS, “Nuclear Energy in America: Preventing It’s Early Demise,” http://csis.org/files/publication/120417\_gf\_wallace\_williams.pdf]

America’s nuclear energy industry is in decline. Low natural gas prices, financing hurdles, new safety and security requirements, failure to resolve the waste issue and other factors are hastening the day when existing reactors become uneconomic, making it virtually impossible to build new ones. Two generations after the United States took this wholly new and highly sophisticated technology from laboratory experiment to successful commercialization, our nation is in danger of losing an industry of unique strategic importance, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future. The pace of this decline, moreover, could be more rapid than most policymakers and stakeholders anticipate. With 104 operating reactors and the world’s largest base of installed nuclear capacity, it has been widely assumed that the United States—even without building many new plants—would continue to have a large presence in this industry for some decades to come, especially if existing units receive further license extensions. Instead, current market conditions are such that growing numbers of these units are operating on small or even negative profit margins and could be retired early. Our nation is in danger of losing an industry of **unique** strategic **importance**, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future.60 | Center for Strategic and International Studies Meanwhile, China, India, Russia, and other **countries are looking to** significantly expand their nuclear energy commitments. By 2016, China could have 50 nuclear power plants in operation, compared with only 14 in 2011. India could add 8 new plants and Russia 10 in the same time frame. These trends are expected to accelerate out to 2030, by which time China, India, and Russia could account for nearly 40 percent of global nuclear generating capacity. Meanwhile, several smaller nations, mostly in Asia and the Middle East, are planning to get into the nuclear energy business for the first time. In all, as many as 15 new nations could have this technology within the next two decades. Meanwhile, America’s share of global nuclear generation is expected to shrink, from about 25 percent today to about 14 percent in 2030, and—if current trends continue—to less than 10 percent by mid-century. **With the center of gravity** for global nuclear investment **shifting** to a new set of players, the United States and the international community face a difficult set of challenges: stemming the **spread of nuclear weapons-**usable materials and know-how; preventing **further catastrophic nuclear accidents**; providing for safe, long-term nuclear waste management; and protecting U.S. energy security and economic competitiveness. **In this context, federal action** to reverse the American nuclear industry’s impending decline is a national security imperative. The United States cannot afford to become irrelevant in a new nuclear age. Our nation’s commercial nuclear industry, its military nuclear capabilities, and its strong regulatory institutions can be seen as three legs of a stool. All three legs are needed to support America’s future prosperity and security and to shape an international environment that is conducive to our long-term interests. Three specific aspects of U.S. leadership are particularly important. First, managing the national and global security risks associated with the spread of nuclear technology to countries that don’t necessarily share the same perspective on issues of nonproliferation and nuclear security or may lack the resources to implement effective SHARE OF NET GLOBAL NUCLEAR GENERATION 1980-2030 Source: Energy Information Agency (EIA) databaseGlobal Forecast 2012 | 61 safeguards in this area. An approach that relies on influence and involvement through a viable domestic industry is likely to be **more effective** and less expensive than trying to contain these risks militarily. Second, **setting global norms** and standards for safety, security, operations, and emergency response. As the world learned with past nuclear accidents and more recently with Fukushima, a major accident anywhere can have lasting repercussions everywhere. As with nonproliferation and security, **America’s ability to exert leadership** and influence in this area is directly linked to the strength of our domestic industry and our active involvement in the global nuclear enterprise. A strong domestic civilian industry and regulatory structure have immediate national security significance in that they help support the nuclear capabilities of the U.S. Navy, national laboratories, weapons complex, and research institutions. Third, in the past, the U.S. government could exert influence by striking export agreements with countries whose regulatory and legal frameworks reflected and were consistent with our own nonproliferation standards and commitments. At the same time, our nation set the global standard for effective, independent safety regulation (in the form of the Nuclear Regulatory Commission), led international efforts to reduce proliferation risks (through the 1970 NPT Treaty and other initiatives), and provided a model for industry self-regulation. The results were not perfect, but America’s institutional support for global nonproliferation goals and the regulatory behaviors it modeled clearly helped shape the way nuclear technology was adopted and used elsewhere around the world. This influence seems certain to wane if the United States is no longer a major supplier or user of nuclear technology. With existing nonproliferation and safety and security regimes looking increasingly inadequate in this rapidly changing global nuclear landscape, American leadership and leverage is more important and more central to our national security interests than ever. To maintain its leadership role in the development, design, and operation of a growing global nuclear energy infrastructure, the next administration, whether Democrat or Republican, must recognize the invaluable role played by the commercial U.S. nuclear industry and take action to prevent its early demise.

#### Thorium is key – spurs elimination of plutonium stockpiles

Donohue, 8/27/12 [Nathan Donohue is a research intern for the Project on Nuclear Issues, CSIS, “Thorium and its Value in Nonproliferation”, <http://csis.org/blog/thorium-and-its-value-nonproliferation>]

The Federation of American Scientists (FAS) recently featured an article on their Science Wonk blog entitled “What about thorium?” As the article discussed, thorium is an element, which like uranium, has the ability to be utilized to produce nuclear power. More importantly, thorium fueled reactors are reported to be more proliferation resistant than uranium fueled reactors. However, despite these assertions, thorium has almost universally been ignored in favor of uranium based nuclear power reactors. The purpose of this piece is to conduct a review of thorium and to develop a better understanding of thorium’s nonproliferation benefits as it relates to nuclear power production. As FAS notes, natural thorium is a fertile material, while not itself fissionable, can be converted into a fissile material suitable to sustain a nuclear fission chain reaction. Accordingly, when natural thorium captures neutrons it becomes a new isotope of thorium which then goes through a process of decay where over a period of weeks, the thorium actually turns into uranium in the form of U-233. Unlike natural thorium, this U-233 is a fissile material suitable to sustain a nuclear fission chain reaction. The use of thorium to produce nuclear power is not a new concept. Research into thorium began in the late 1950’s and in 1965, Alvin Weinberg, the head of the Oak Ridge National Laboratory, and his team [built](http://www.wired.com/magazine/2009/12/ff_new_nukes/) a working thorium reactor using a molten salt bath design. Thorium was used to power one of the first commercial nuclear power plants in the U.S. in Shippingport, Pennsylvania in 1977. Nevertheless, research into thorium never found a foothold in the U.S. nuclear power infrastructure. By 1973, thorium research and development was fading to the uranium based focus of the U.S. nuclear industry, which was in the process of developing 41 new nuclear plants, all of which used uranium. The Shippingport facility was one of the last vestiges of thorium research in the U.S. for decades. Recently there has been a renewed focus on thorium based nuclear power, specifically in regards to the benefits related to spent fuel, [including](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) research involving the European Commission, India, Canada, Slovakia, the Russian Federation, China, France and the Republic of Korea. The utilization of thorium is purported to have the ability to reduce spent fuel waste by upwards of 50% while at the same time reducing the amount of plutonium within the fuel. To that end, thorium fuel designs are regarded as a better alternative for power production in terms of the plutonium proliferation risk inherent in spent fuel from uranium-fueled reactors. For example, all 104 reactors in the U.S. use uranium fuel. In these reactors, when the uranium in the form of U-238 captures extra neutrons, it goes through a process of decay whereby plutonium in the form of Pu-239 is produced. The spent fuel can then be reprocessed to isolate and remove this plutonium, which can then be used in the core of a nuclear weapon. Roughly 13 kilograms (kg) of reactor grade plutonium is necessary to power a nuclear weapon. In total, these 104 U.S. reactors accumulate roughly 2,000 tons of spent fuel per year. The 2,000 tons of waste produced annually by these nuclear utilities, contains roughly [25,520](http://www.fas.org/rlg/980826-pu.htm) kg of plutonium or enough plutonium to build 1,963 nuclear weapons a year. Globally, the total world generation of reactor-grade plutonium in spent fuel is equal to roughly 70 tons annually; more than two times what the U.S. produces. Conversely, there is the thorium seed and blanket design. This reactor [concept](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is based on a design comprised of inner seed rods of uranium which provide neutrons to an outer blanket of thorium-uranium dioxide rods, creating U-233, which in turn powers the nuclear reactor. The important difference with this design is in the nature of the spent fuel. As advocates of thorium such as the U.S. company Lightbridge purport, this process would realize a significant reduction in the “quantity and quality” of plutonium produced within the spent fuel, achieving upwards of an 80% reduction in plutonium. For [example](http://www.americanscientist.org/issues/feature/2003/5/thorium-fuel-for-nuclear-energy/5.), “a thorium-fueled reactor …would produce a total of 92 kilograms of plutonium per gigawatt-year of electricity generated, whereas a conventional water-cooled reactor would result in 232 kilograms.” In addition to a lower percentage of plutonium in the spent fuel, the composition of the plutonium produced is different as well, featuring a higher content of the plutonium isotopes Pu-238, Pu-240, and Pu-242. Weapons-grade plutonium requires roughly 90% plutonium in the form of Pu-239. Plutonium with higher contents of Pu-238 and Pu-240 is inherently unpredictable, and can spontaneously fission, making it “difficult or impossible to compress a bomb core containing several kilograms of plutonium to supercriticality before the bomb [disassembles] with a greatly reduced yield.” This reduces the reliability of a given nuclear weapon, **thus making the thorium process less suitable for the development of plutonium for a nuclear weapon.** The International Atomic Energy Agency [considers](http://hdl.handle.net/1721.1/29956) plutonium containing more than 81% Pu-238 “not weapons-usable.” Although thorium offers the ability to reduce the plutonium risk inherent in spent fuel, it does not eliminate the need for enriched uranium. Specifically, Lightbridge’s seed and blanket fuel technology would require uranium enriched to less than 20 % in both the seed and blanket fuel rods. Equally significant, the U-233 that is produced in the seed and blanket design poses its own proliferation concern. A nuclear weapon can be constructed with a significant quantity of U-233, which the IAEA defines as [**8**](http://moltensalt.org/references/static/downloads/pdf/ORNL-6952.pdf) **kg of U-233**, and both the U.S. and India have detonated nuclear devices which utilized U-233. At the same time though, U-233 produced through this design also contains a small amount of the uranium isotope U-232, which emits a powerful, highly penetrating gamma ray. As [noted](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) by Ray Sollychin, the Executive Director of the Neopanora Institute-Network of Energy Technologies, this reportedly makes “U233 weapons significantly more difficult to conceal and much more dangerous to handle.” In addition, reactors which use a thorium based seed and blanket design are engineered so that the U-233 which is produced is simultaneously denatured or blended with U-238, further reducing its suitability for a nuclear weapon. Moreover, the blanket is designed to remain within the reactor for upwards of nine to twelve years. This allows for the U-233 that is produced within the blanket to burn “in situ.” Lastly, any attempt to prematurely remove the blanket and separate the U-233 from the U-238, U-234 and U-236 isotopes [will](http://hdl.handle.net/1721.1/29956) also “remove the fissile U-235 from the resulting enriched steam,” once again making it unsuitable for a nuclear weapon. From this brief review of thorium and its properties, it appears clear that from a proliferation standpoint, that thorium fueled reactors provide for a safer nuclear power production process. In fact, it begs the question why thorium was overlooked in the first place. The simple answer is that the U.S. nuclear infrastructure was originally designed to facilitate mass quantities of plutonium for the production of a nuclear weapons arsenal. According to an article by Richard Martin in Wired magazine, “Locked in a struggle with a nuclear- armed Soviet Union, the U.S. government in the 60’s chose to build uranium-fueled reactors — in part because they produce plutonium that can be refined into weapons-grade material.” During the Cold War, maintaining nuclear parity with the Soviets was an overarching goal. Yet, with the end of the Cold War, the focus has shifted from acquiring nuclear weapons to stymying their development by both state and non-state actors. Therefore, the plutonium byproduct of the global nuclear power infrastructure has now become a liability and a proliferation risk. As the IAEA has [noted](http://www-pub.iaea.org/mtcd/publications/pdf/te_1450_web.pdf), “for nuclear power to be accepted as a significant contributor of primary energy in the next century, it should be based on a fuel cycle, which is highly proliferation-resistant.” For this reason, further **research and development of thorium** needs to be explored, not only in terms of seed and blanket technology but other thorium based designs as well, including thorium-based Pebble Bed Reactor, fast reactors (liquid metal cooled and gas cooled); and advanced designs such as Molten Salt Reactor and Accelerator Driven System.

#### And, in-situ reprocessing removes plutonium – solves extinction from terrorism

Rhodes, 12 [February, Professor Chris Rhodes is a writer and researcher. He studied chemistry at Sussex University, earning both a B.Sc and a Doctoral degree (D.Phil.); rising to become the youngest professor of physical chemistry in the U.K. at the age of 34. A prolific author, Chris has published more than 400 research and popular science articles (some in national newspapers: The Independent and The Daily Telegraph) He has recently published his first novel, "University Shambles" was published in April 2009 (Melrose Books), “Hopes Build for Thorium Nuclear Energy”, <http://oilprice.com/Alternative-Energy/Nuclear-Power/Hopes-Build-for-Thorium-Nuclear-Energy.html>]

There is much written to the effect that thorium might prove a more viable nuclear fuel, and an energy industry based upon it, than the current uranium-based process which serves to provide both energy and weapons - including "depleted uranium" for armaments and missiles. There are different ways in which energy might be extracted from thorium, one of which is the accelerator-driven system (ADS). Such accelerators need massive amounts of electricity to run them, as all particle accelerators do, but these are required to produce a beam of protons of such intensity that until 10 years ago the prevailing technology meant that it could not have been done. As noted below, an alternative means to use thorium as a fuel is in a liquid fluoride reactor (LFR), also termed a molten salt reactor, which avoids the use of solid oxide nuclear fuels. Indeed, China has made the decision to develop an LFR-based thorium-power programme, to be active by 2020.¶ Rather like nuclear fusion, the working ADS technology is some way off, and may never happen, although Professor Egil Lillestol of Bergen University in Norway is pushing that the world should use thorium in such ADS reactors. Using thorium as a nuclear fuel is a laudable idea, as is amply demonstrated in the blog "Energy from Thorium" (http://thoriumenergy.blogspot.com/). However, the European Union has pulled the plug on funding for the thorium ADS programme, which was directed by Professor Carlo Rubbia, the Nobel Prize winner, who has now abandoned his efforts to press forward the programme, and instead concentrated on solar energy, which was another of his activities. Rubbia had appointed Lillestol as leader of the CERN physics division over two decades ago, in 1989, who believes that the cause is not lost.¶ Thorium has many advantages, not the least being its greater abundance than uranium. It is often quoted that there is three times as much thorium as there is uranium. Uranium is around 2 - 3 parts per million in abundance in most soils, and this proportion rises especially where phosphate rocks are present, to anywhere between 50 and 1000 ppm. This is still only in the range 0.005% - 0.1% and so even the best soils are not obvious places to look for uranium. However, somewhere around 6 ppm as an average for thorium in the Earth's crust is a reasonable estimate. There are thorium mineral deposits that contain up to 12% of the element, located at the following tonnages in Turkey (380,000), Australia (300,000), India (290,000), Canada and the US combined (260,000)... and Norway (170,000), perhaps explaining part of Lillestol's enthusiasm for thorium based nuclear power. Indeed, Norway is very well endowed with natural fuel resources, including gas, oil, coal, and it would appear, thorium.¶ An alternative technology to the ADS is the "Liquid Fluoride Reactor" (LFR), which is described and discussed in considerable detail on the <http://thoriumenergy.blogspot.com/> blog, and reading this has convinced me that the LFR may provide the best means to achieve our future nuclear energy programme. Thorium exists naturally as thorium-232, which is not of itself a viable nuclear fuel. However, by absorption of relatively low energy "slow" neutrons, it is converted to protactinium 233, which must be removed from the reactor (otherwise it absorbs another neutron and becomes protactinium 234) and allowed to decay over about 28 days to uranium 233, which is fissile, and can be returned to the reactor as a fuel, and to breed more uranium 233 from thorium. The "breeding" cycle can be kicked-off using plutonium say, to provide the initial supply of neutrons, and indeed the LFR would be a useful way of disposing of weapons grade plutonium and uranium from the world's stockpiles while converting it into useful energy.¶ The LFR makes **in-situ reprocessing possible**, much more easily than is the case for solid-fuel based reactors. I believe there have been two working LFR's to date, and if implemented, the technology would avoid using uranium-plutonium fast breeder reactors, which need high energy "fast" neutrons to convert uranium 238 which is not fissile to plutonium 239 which is. The LFR is inherently safer and **does not require liquid sodium** as a coolant, while it also **avoids the risk of plutonium getting into the hands of terrorists**. It is worth noting that while uranium 235 and plutonium 239 could be shielded to avoid detection as a "bomb in a suitcase", uranium 233 could not, because it is always contaminated with uranium 232, which is a strong gamma-ray emitter, and is far less easily concealed.¶ It has been claimed that thorium produces "250 times more energy per unit of weight" than uranium. Now this isn't simply a "logs versus coal on the fire" kind of argument, but presumably refers to the fact that while essentially all the thorium can be used as a fuel, the uranium must be enriched in uranium 235, the rest being "thrown away" and hence wasted as "depleted" uranium 238 (unless it is bred into plutonium). If both the thorium and uranium were used to breed uranium 233 or plutonium 239, then presumably their relative "heat output" weight for weight should be about the same as final fission fuels? If this is wrong, will someone please explain this to me as I should be interested to know?¶ However, allowing that the LFR in-situ reprocessing is a far easier and less dangerous procedure, the simple sums are that contained in 248 million tonnes of natural uranium, available as a reserve, are 1.79 million tonnes of uranium 235 + 246.2 million tonnes of uranium 238. Hence by enrichment 35 million tonnes (Mt) of uranium containing 3.2% uranium 235 (from the original 0.71%) are obtained. This "enriched fraction" would contain 1.12 Mt of (235) + 33.88 Mt of (238), leaving in the other "depleted" fraction 248 - 35 Mt = 213 Mt of the original 248 Mt, and containing 0.67 Mt (235) + 212.3 Mt (238). Thus we have accessed 1.79 - 0.67 = 1.12 Mt of (235) = 1.12/224 = 4.52 x 10\*-3 or 0.452% of the original total uranium. Thus on a relative basis thorium (assuming 100% of it can be used) is 100/0.452 = 221 times as good weight for weight, which is close to the figure claimed, and a small variation in enrichment to a slightly higher level as is sometimes done probably would get us to an advantage factor of 250!¶ Plutonium is a by-product of normal operation of a uranium-fuelled fission reactor. 95 to 97% of the fuel in the reactor is uranium 238. Some of this uranium is converted to plutonium 239 and plutonium 241 - usually about 1000 kg forms after a year of operation. At the end of the cycle (a year to 2 years, typically), very little uranium 235 is left and about 30% of the power produced by the reactor actually comes from plutonium. Hence a degree of "breeding" happens intrinsically and so the practical advantage of uranium raises its head from 1/250 (accepting that figure) to 1/192, which still weighs enormously in favour of thorium!¶ As a rough estimate, 1.4 million tonnes of thorium (about one third the world uranium claimed, which is enough to last another 50 years as a fission fuel) would keep us going for about 200/3 x 50 = 3,333 years. Even if we were to produce all the world's electricity from nuclear that is currently produced using fossil fuels (which would certainly cut our CO2 emissions), we would be O.K. for 3,333/4 = 833 years. More thorium would doubtless be found if it were looked for, and so the basic raw material is not at issue. Being more abundant in most deposits than uranium, its extraction would place less pressure on other fossil fuel resources used for mining and extracting it. Indeed, thorium-electricity could be piped in for that purpose.¶ It all sounds great: however, the infrastructure would be huge to switch over entirely to thorium, as it would to switch to anything else including hydrogen and biofuels. It is this that is the huge mountain of resistance there will be to all kinds of new technology. My belief is that through cuts in energy use following post peak oil (and peak gas), we may be able to produce liquid fuels from coal, possibly using electricity produced from thorium, Thorium produces less of a nuclear waste problem finally, since fewer actinides result from the thorium fuel cycle than that from uranium. Renewables should be implemented wherever possible too, in the final energy mix that will be the fulcrum on which the survival of human civilization is poised.

#### And, dual use makes other reactors too risky – federal investment streamlines tech transfers

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Advanced nuclear power must be proliferation resistant. Nuclear weapons can cause terrible destruction of whole cities and contaminate entire regions, so expansion of nuclear power must come with assurances that the risk of proliferation of nuclear weapons is not increased. The technology for making such weapons is widely known, although the process is difficult and expensive. Building commercial nuclear power plants has not led to weapons development; nations that have nuclear weapons have developed them with purposeful programs and facilities. However dual-use technologies such as centrifuge enrichment of U-235 that can make fuel for PWRs can be adapted to make highly enriched uranium for weapons. After President Eisenhower’s Atoms for Peace speech the US helped nations to acquire the knowledge and materials to use nuclear technology for peaceful purposes. Unexpectedly this knowledge led India to develop nuclear weapons instead. Selling advanced nuclear power plants worldwide does not require providing each nation with the technical skills and materials to build nuclear power plants or nuclear weapons. Consider the airplane and jet engine industry: nations want prestigious national airlines. Fully 83 countries, from Algeria to Yemen, operate airlines using the Boeing 747 airliner, yet these nations do not have their own airframe or engine production or maintenance capabilities. General Electric makes a business of maintaining and overhauling engines at GE’s own service centers. This is a technology-transfer-resistant model suitable for LFTR installation and maintenance. The liquid fluoride thorium reactor is proliferation resistant. LFTR requires fissile material to be transported to the site for startup, but not thereafter. LFTR then creates and burns fissile U-233 that conceivably could be used instead for a nuclear weapon. Would this ever happen? China, USA, Russia, India, UK, France, Pakistan, and Israel, which account for 57% of global CO2 emissions, already have nuclear weapons and no incentive to subvert LFTR technology. So just implementing LFTRs in these nations would be a big step in addressing global warming. Many additional nations, such as Canada, Japan, and South Africa, have the capability to build nuclear weapons but have chosen not to, so there is no incentive for them to subvert LFTR technology for this purpose. Should LFTRs be implemented in other non-weapons states? Certainly terrorists could not steal this uranium dissolved in a molten salt solution along with even more radioactive fission products inside a sealed reactor. IAEA safeguards include physical security, accounting and control of all nuclear materials, surveillance to detect tampering, and intrusive inspections. LFTR’s neutron economy contributes to securing its inventory of nuclear materials. Neutron absorption by uranium-233 produces about 2.4 neutrons per fission—one to drive a subsequent fission and another to drive the conversion of Th-232 to U-233 in the blanket molten salt. Taking into account neutron losses from capture by protactinium and other nuclei, a well-designed LFTR reactor will direct just about 1.00 neutrons per fission to thorium transmutation. This delicate balance doesn’t create excess U-233, just enough to generate fuel indefinitely. If this conversion ratio could be increased to 1.01, a 100 MW LFTR might generate kilogram of excess U-233 per year. If meaningful quantities of uranium-233 are misdirected for non-peaceful purposes, the reactor will report the diversion by stopping because of insufficient U-233 to maintain a chain reaction. Yet a sovereign nation or revolutionary group might expel IAEA observers, stop the LFTR, and attempt to remove the U-233 for weapons. Accomplishing this would require that skilled engineers, working in a radioactive environment, modify the reactor's fluorination equipment to separate uranium from the fuel salt instead of the thorium blanket salt. What would happen to them? The neutrons that produce U-233 also produce contaminating U-232, whose decay products emit 2.6 MeV penetrating gamma radiation, hazardous to weapons builders and obvious to detection monitors. The U-232 decays via a cascade of elements to thallium- 208, which builds up and emits the radiation. Depending on design specifics, the proportion of U-232 would be about 0.13% for a commercial power reactor. A year after separation, a weapons worker one meter from a subcritical 5 kg sphere of such U-233 would receive a radiation dose of 43 mSv/hr, compared to 0.003 mSv/hr from plutonium, even less from U-235. Death becomes probable after 72 hours exposure. After ten years this radiation triples. A resulting weapons would be highly radioactive and therefore dangerous to military workers nearby. The penetrating 2.6 MeV gamma radiation is an easily detected marker revealing the presence of such U-233, possibly even from a satellite. U-232 can not be removed chemically, and centrifuge separation from U-233 would make the centrifuges too radioactive to maintain. Conceivably, nuclear experts might try to stop the reactor, chemically extract the uranium, and devise chemistry to remove the intermediate elements of the U-232 decay chain before the thallium is formed, except that the isotopes are continually replaced by U-232 decay. They might try to quickly separate the small amount of Pa-233 from the uranium and let it decay to pure U-233, but they would have to design and build a special chemical plant within the radioactive reactor. Bomb-makers might attempt quickly fabricate a weapon from newly separated U-233 before radiation hazards become lethal; even so there will be sufficient U-232 contamination that penetrating 2.6 MeV gamma rays will be readily detected. The challenge of developing and perfecting such new processes will be more difficult and expensive than creating a purpose-built weapons factory with known technology, such as centrifuge enrichment of U-235 conducted in Iran or PUREX for extracting plutonium from solid fuel irradiated in LWRs. Bruce Hoglund wrote a fuller report of the challenges to would-be bomb makers, and there is a discussion in the comments of the energy from thorium blog, both linked in the references section. A LFTR operating under IAEA safeguards might additionally be protected by injecting U-238 from a remotely controlled tank of U-238. The U-238 would dilute (denature) the U-233 to make it useless for weapons, but it would also stop the reactor and ruin the fuel salt for further use. For personnel safety, any U-233 material operations must be accomplished by remote handling equipment within a radioactively shielded hot cell. This can be designed to make it very hard for any insiders or outsiders to remove material from the hot cell. Another hurdle for the would-be pilferer uranium from 700° C molten salt is the retained radioactive fission products. Even with a l-hour cooling period to allow decay of the short-lived isotopes, the salt still releases ~350 W/liter of heat. That heat comes from deadly ionizing radiation that would kill a nearby pilferer in minutes unless shielded by meters of concrete or water or heavy lead. This fission product radiation is the same self protection that protects spent LWR fuel from theft. The single-fluid DMSR is highly proliferation resistant. The DMSR contains enough U-238 mixed with fissile U-233 and U-235 that the uranium can not sustain the rapid fission reaction necessary for a nuclear weapon. Uranium enriched to less than 20% U-235 is termed LEU, low-enriched uranium. The LEU fuel is not suitable for a nuclear weapon, which typically requires over 90% U-235. The DMSR with at least 80% U-238 is said to be denatured with it. The DMSR has less chemical processing equipment than the two- fluid LFTR, which uses fluorine chemistry to direct U-233 generated in the thorium blanket to the core. The DMSR has no chemical processing equipment in the reactor plant that might somehow be modified to divert U-233 for a weapons program. Because of the substantial amount of U-238 in the DMSR, it does breed plutonium from neutron capture, just as does a standard LWR. Some Pu-239 fissions. However the fissile Pu-239 isotope that might be desired for a weapon is only 31% of the plutonium, mixed with other isotopes (Pu-238, 240, 241, 242) that make the plutonium unsuitable for a weapon. Because the plutonium is dissolved in the fuel salt, there is no opportunity to remove it early to obtain weapons grade Pu-239 before neutrons convert it to other isotopes, as in a LWR, CANDU, RBMK, or military plutonium production reactor. Further, plutonium’s chemistry makes it difficult to remove from the salt. Also, the salt contains highly radioactive fission products as well as U-232, whose decay daughters emit a penetrating 2.6 MeV gamma ray. DMSR is the most proliferation-resistant nuclear reactor. There are easier paths than U-233 to make nuclear weapons. Pakistan has illustrated how a developing nation can make uranium weapons using centrifuge enrichment; in a dual path it simultaneously developed the methods to extract weapons grade plutonium from uranium reactors. India and North Korea developed plutonium weapons from heavy water or graphite moderated reactors with online fuel exchange capability. Iran has built centrifuge enrichment plants capable of making highly enriched U-235 for nuclear weapons. These proven weapons paths eliminate the incentive for nations to try to develop nuclear weapons via the technically challenging and expensive U-233 path. Only a determined, well-funded effort on the scale of a national program could overcome the obstacles to illicit use of uranium- 232/233 produced in a LFTR reactor. Such an effort would certainly find that it was less problematic to pursue the enrichment of natural uranium or the breeding of plutonium. LFTR reduces existing weapons proliferation risks. Deploying LFTRs on a global scale will not increase the risk of nuclear weapons proliferation, but rather decrease it. Starting up LFTRs with existing plutonium can **consume inventories** of this weapons-capable material. The thorium-uranium fuel cycle reduces demand for U-235 enrichment plants, which can make weapons material nearly as easily as power reactor fuel. Abundant energy cheaper than coal can increase prosperity and enable lifestyles that lead to sustainable populations, reducing the potential for wars over resources.

Advantage two is Resource Wars

Only LFTR expansion solves economical water desalination

Sorenson, 09 [Kirk, Co-founder and Chief Technologist at Flibe Energy, chief nuclear technologist at Teledyne Brown Engineering aerospace engineer at NASA, University of Tennessee-Knoxville, Georgia Institute of Technology, Utah State University, <http://energyfromthorium.com/lftradsrisks.html>]

Some of the many advantages of the LFTR system over other nuclear reactor designs are outlined below. While LWRs can produce U233 from thorium, they will not provide the various advantages outlined below, because of their use of thorium in solid form. It is the unique combination of the thorium cycle and the liquid fluoride reactor that **grants all of the following advantages only from the LFTR** system.¶ ¶ Safety--LFTRs are designed to take advantage of the physics of the thorium cycle for optimum safety. The fluid in the core is not pressurized, thus eliminating the driving force of radiation release in conventional approaches. The LFTR reactor cannot melt down because of a runaway reaction or other nuclear reactivity accidents (such as at Chernobyl), because any increase in the reactor's operating temperature results in a reduction of reactor power, thus stabilizing the reactor without the need for human intervention. Further, the reactor is designed with a salt plug drain in the bottom of the core vessel. If the fluid gets too hot or for any other reason including power failures, the plug naturally melts, and the fluid dumps into a passively cooled containment vessel where decay heat is removed. This feature prevents any Three Mile Island-type accidents or radiation releases due to accident or sabotage and provides a convenient means to shut down and restart the system quickly and easily.¶ Proliferation Resistance--For all practical purposes, U233 is worthless as a nuclear weapons material, and indeed no nation has attempted to weaponize U233 because of the abundance of difficulties. U233 is considered an unsuitable choice for nuclear weapons material because whenever U233 is generated, uranium-232 (U232) contamination inevitably occurs. U232 rapidly decays into other elements, including thallium-208, a hard-gamma-ray emitter whose signature is easily detectable. The hard gamma rays from thallium-208 cause ionization of materials destroying the explosives and electronics of a nuclear weapon, and heavy lead shielding is required to protect personnel assembling the warhead. It is possible to generate U233 with little U232 contamination using specialized reactors (such as at the Hanford Site), but not with an LFTR. Any attempt to increase production of U233 in an LFTR reactor will generate U232 contamination and any attempt to steal quantities of U233 results in the reactor shutting down.¶ Energy Production--Because nearly all of the thorium is used up in an LFTR (versus only about 0.7% of uranium mined for an LWR), the reactor achieves high energy production per metric ton of fuel ore, on the order of 300 times the output of a typical uranium LWR. The LFTR allows **much higher operating temperatures** than does a typical LWR **therefore** a **higher thermodynamic efficiency**. The turbine system believed best suited for its operation is a triple-reheat closed-cycle helium turbine system, which should convert 50% of the reactor heat into electricity compared to today's steam cycle (~25% to 33%). This efficiency gain translates to about 4.11 million barrels of crude oil equivalent per year more than that generated by a steam system. Capital costs are lower due to smaller reactor & turbo-machinery size, low reactor pressures and minimal redundant safety systems. The greater energy production capability of LFTRs means we estimate the cost for electricity from a LFTR plant could be 25% to over 50% less than that from a LWR.¶ Waste--In theory, LFTRs would produce far less waste along their entire process chain, from ore extraction to nuclear waste storage, than LWRs. A LFTR power plant would generate 4,000 times less mining waste (solids and liquids of similar character to those in uranium mining) and would generate 1,000 to 10,000 times less nuclear waste than an LWR. Additionally, because LFTR burns all of its nuclear fuel, the majority of the waste products (83%) are safe within 10 years, and the remaining waste products (17%) need to be stored in geological isolation for only about 300 years (compared to 10,000 years or more for LWR waste). Additionally, the LFTR can be used to "burn down" waste from an LWR (nearly the entirety of the United States' nuclear waste stockpile) into the standard waste products of an LFTR, so long-term storage of nuclear waste would no longer be needed.¶ Supply--Thorium is abundant in the Earth's crust. It is the 36th most plentiful element in the crust--four times as common as uranium and 5,000 times as plentiful as gold. According to the U.S. Geological Survey's 2006 Mineral Yearbook, the United States is estimated to have 300,000 tons of thorium reserves (about 20% of the world's supply), more than half of which is easily extractable. Considering only the readily accessible portion, this national resource translates to nearly 1 trillion barrels of crude oil equivalent--five times the entire oil reserves of Saudi Arabia. In addition to the naturally occurring reserves, the United States currently has 3,200 metric tons of processed thorium nitrate buried in the Nevada desert. That supply is roughly equivalent to 21 billion barrels of crude oil equivalent when used in an LFTR with only minimal processing effort.¶ Secondary Products--Because an LFTR is so energy dense, the electricity and excess heat from the reactor can be used to fuel other industries beyond electricity production, including **economical desalinization** of water, cracking of hydrogen from water or hydrocarbons, generation of ammonia for fertilizer and fuel cells, and extraction of hydrocarbons from oil shale and tar sands. Additionally, the nuclear waste products from the LFTR include stable rhodium and ruthenium, rare elements needed in modern electronics; technetium-99, which offers great promise as a catalyst similar to platinum; iodine-131 and cesium-137 for medical applications; strontium-90 for radioisotope power; and xenon, used in commercial products and industrial processes.

#### Solves global water stress—reactor design key

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

World water resources are stressed. UNESCO reports that 8% of worldwide electric power is used for water pumping, purification, and wastewater treatment. The World Bank says 2.6 billion people have no access to sanitation, leading to illness that reduces GDP by 6%. Over a billion people have no access to electricity. Agriculture uses 70% of world water withdrawals, and food production must increase 70% in the next 40 years to sustain the population. The withdrawal of groundwater has revolutionized agriculture, but replenishment is insufficient for sustainability. Shrinking glaciers have temporarily added to water flows, but due to global warming these sources will diminish along with their buffering effects. World energy production also competes for water resources. All thermal power plants require cooling, almost always accomplished with water by evaporative cooling or heating water in a river or ocean. Thermal power plants include nuclear, coal, natural gas, biomass, concentrated solar, and geothermal technologies. Even hydroelectric power consumes water by evaporation from reservoirs. LFTR power can reduce global water stress. High-temperature, air-cooled nuclear power plants such as LFTR will **be especially valuable** in water-stressed regions, because they do not compete for this scarce resource. With electrical power, sanitation systems can economically treat wastewater for reuse in agriculture. Treated waste water represents a growing fraction of total water withdrawals in Mideast countries Saudi Arabia (1%), Oman (3%), Jordan (9%), and Qatar (10%). Water desalination is becoming more efficient. Today most of the daily 70 million cubic meters of potable water by desalination is produced in plants that use petroleum fuels for energy, increasing CO2 emissions. The desalination plants are mostly in the wealthy countries of the arid Mideast. The older, common multi-stage flash (MSF) steam distillation processes use about 25 kWh(t) per cubic meter of water produced. Cogeneration improves this; when the MSF facility is an integral part of the power plant cooling system the power requirements can be halved to roughly 10 kWh/m3. Reverse osmosis (RO) is most commonly used in new desalination plants. Reverse osmosis requires up to 6 kWh(e)/m3, producing desalinated water at about $0.50/m3. The predominant cost for desalinated water is energy. Reducing the cost of energy with **LFTR will reduce the cost** of the water. Replacing petroleum fueled desalination plants with LFTRs will also reduce CO2 emissions. Multi-effect distillation (MED) is even more efficient, requiring only 1 kWh(t)/m3 of power. Siemens has developed an electrolysis based desalination technology that uses 1.5 kWh(e)/m3. For LFTR with its high 700°C temperature, the Brayton power conversion cycle is highly efficient, minimizing waste rejected heat. In this case an advanced multi effect distillation (AMED) process can cogenerate an additional 1 m3 of water for each 30 kWh of electric power produced. Since fuel costs are very small for LFTR (and most nuclear power plants) they operate at full power, continuously. Electric power peak demand is typically about twice minimum demand. Cogenerating LFTR electric power plants can be designed to use excess power to desalinate water **during off-peak periods**.

#### This stabilizes global population and averts resource conflict

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Resource depletion may be more severe than climate change.

Global warming is indeed a severe threat to our environment and human civilization. But resource depletion may be an **even more immediate** threat. Physicist Tom Murphy writes the blog, Do the Math, encouraging people to quantify the problems and envisioned solutions. In a 2012 interview with OilPrice.com he says: “I see climate change as a serious threat to natural services and species survival, perhaps ultimately having a very negative impact on humanity. But resource depletion trumps climate change for me, because I think this has the potential to effect far more people on a far shorter timescale with far greater certainty. Our economic model is based on growth, setting us on a collision course with nature. When it becomes clear that growth cannot continue, the ramifications can be sudden and severe. So my focus is more on averting the chaos of economic/resource/agriculture/distribution collapse, which stands to wipe out much of what we have accomplished in the fossil fuel age. To the extent that climate change and resource limits are both served by a deliberate and aggressive transition away from fossil fuels, I see a natural alliance.” Population is stable in developed nations. World population is projected to grow from 7 billion to over 9 billion people. Most of this growth is in the developing nations. The US and other economically strong OECD nations have little population growth, attributable to immigration from the developing nations. Increasing population will increase the demand for resources of food and energy. Increased demand leads to increased competion and possible conflict. Impoverished countries birth the most children. This scatter plot uses data from the 2008 CIA world fact book. Each point corresponds to one nation, relating average number of children born to each woman and GDP per capita - closely related to income. It demonstrates that countries with high GDP per capita have birthrates that lead to a sustainable population. All the countries to the left of the vertical bar would have diminishing populations, except for immigration. With increased income, there is less need to have children to work in agriculture, or to care for aging parents. There is less need to give birth to extra children to compensate for childhood deaths. With work saving technologies such as water pumps, efficient cook stoves, and washing machines, women are freed from constant labor. They are able to have time for education and to earn money. With more independence and access to contraceptives, women can choose to have fewer children, as evidenced above. Prosperity stabilizes population. In this same plot is added a horizontal bar at $7,500 GDP per capita, arbitrarily chosen and labeled “Prosperity”. The poor nations, below $7,500, are those that have the highest birthrates. This strongly implies that improving the economic status of poor nations will lower birthrates, leading to a stable or shrinking world population. This plot cries out for a need to increase world prosperity to $7,500 GDP per capita, only 16% of the US number. With a stable or shrinking global population, world civilization can be sustainable. At the Wall Street Journal ECOmomics forum in March 2012 Microsoft founder and philanthropist Bill Gates remarked: "If you want to improve the situation of the poorest two billion on the planet, **having the price of energy go down** substantially is about the best thing you could do for them. ... Energy is the thing that allowed civilization over the last 220 years to dramatically change everything." This plot, also with CIA data, shows the relationship between GDP and energy - specifically electric energy, measured in kilowatt- hours per capita per year. For our civilization, electric energy is the most valuable and useful form of energy. Unlike heat from fire, or power from falling water, electric power can be used for many purposes essential to economic development. Applications include water sanitizing and distribution, sewage processing, lighting, heating, refrigeration, air conditioning, cooking, communications, computing, transportation, food processing, medical care, manufacturing, industry, and commerce. These are all hallmarks of emerging prosperity. Adequate electric power alone cannot guarantee a prosperous economy and civilization without education, basic health care, rule of law, property rights, financial system, and good government. But electricity is essential for economic progress. Over 1.3 billion people, 20% of the world population, have no access to electricity. Even rapidly developing nations such as India and South Africa can not provide full time electricity. over 10 million. Electricity can power sewage processing systems, necessary to assure clean water. The World Bank says 2.6 billion people have no access to sanitation, leading to illness that reduces GDP by 6%. Diarrhea is responsible for more child deaths than AIDS, TB, and malaria combined. UNESCO reports that 8% of worldwide electric power is used for water pumping, purification, and wastewater treatment. Clean water distribution is one example of how affordable, reliable power can free women from hauling water, helping to lead to a standard of living with time for education, gainful work, women’s independence, and choices about reproduction. The previous plot suggests an annual 2,000 kWh per capita supply leads to the $7,500 GDP per capita level that leads to sustainable birthrates and population. This minimum electric energy supply rate is 230 watts per person, about 16% of the US rate. In summary, an economy with minimum electric power availability of 230 W per person is needed to achieve the modest prosperity level of $7,500 per person leading to a sustainable population. In India today, average electric power consumption per capita is 85 W; 40% of the people have no access to electricity, and another 40% have access only a few hours per day. The long term goal of India’s government ministers is 570 W per capita, compared to 1400 W in the US.

#### Sustainable electricity access is key to stable population and resource competition

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Over a billion people have no access to electricity, a key to economic development and a lifestyle in which women have chore- free time, are educated, work, gain independence, and make their own decisions about reproduction. Providing developing nations with affordable energy can help them reach such goals. Even rapidly developing nations such as India and South Africa can not provide full time electricity. The world’s prosperous nations generally have a sustainable or diminishing populations. A sustainable population reduces natural resources competition and causes for war.

#### Water shortages cause instability, failed states and global conflict—recency matters

Lee, 12 [Matthew Lee, Huffington Post, “Water War Could Erupt In Coming Decades, Says U.S. Intel Report”, http://www.huffingtonpost.com/2012/03/22/water-war-intel-report-hillary-clinton\_n\_1372496.html]

The report is based on a classified National Intelligence Estimate on water security, which was requested by Secretary of State Hillary Rodham Clinton and completed last fall. It says floods, scarce and poor quality water, combined with poverty, social tension, poor leadership and weak governments will contribute to instability that could lead the failure of numerous states. Those elements "will likely increase the risk of instability and state failure, exacerbate regional tensions and distract countries from working with the United States on important policy objectives," said the report, which was released at a State Department event commemorating World Water Day. Clinton, who unveiled a new U.S. Water Partnership that aims to share American water management expertise with the rest of the world, called the findings "sobering." "These threats are real and they do raise serious security concerns," she said. The report noted that countries have in the past tried to resolve water issues through negotiation but said that could change as water shortages become more severe. "We judge that **as water shortages become more acute** beyond the next 10 years, **water in shared basins will** increasingly be used as leverage; the use of water as a weapon or to further terrorist objectives, also will become more likely beyond 10 years," it said. The report predicts that upstream nations – more powerful than their downstream neighbors due to geography – will limit access to water for political reasons and that countries will regulate **internal supplies** to suppress separatist movements and dissident populations. At the same time, terrorists and rogue states may target or threaten to target water-related infrastructure like dams and reservoirs more frequently. Even if attacks do not occur or are only partially successful, the report said "the fear of massive floods or loss of water resources would alarm the public and cause governments to take costly measures to protect the water infrastructure." The unclassified summary of the intelligence estimate does not identify the specific countries most at risk. But it notes that the study focused on several specific rivers and water basins. Those included the Nile in Egypt, Sudan and nations farther south, the Tigris and Euphrates in Iraq and the greater Middle East, the Mekong in China and Southeast Asia, the Jordan that separates Israel from the Palestinian territories, the Indus and the Brahmaputra in India and South Asia as well as the Amu Darya in Central Asia. At a U.N. news conference in New York marking World Water Day, Ania Grobicki, executive secretary of the Global Water Partnership, which includes government, private sector, academic and nongovernmental groups, said, "Water is a global issue and is increasingly seen as a global risk." She pointed to the World Economic Forum's 2011 Global Risk Report which for the first time included water as one of the top five global risks. The report said the rapidly **rising** global **population** and growing prosperity **are putting "unsustainable pressure"** on resources and demand for water, food and energy is expected to rise by 30 percent to 50 percent in the next two decades. "Shortages could cause social and political instability, geopolitical conflict and irreparable environmental damage," the report warned.

#### Escalates globally

**Rasmussen 11** – CEO, Monday Morning; Founder, Green Growth Leaders, founder of the Copenhagen Climate Council (Erik, 04/12, “Prepare for the Next Conflict: Water Wars,” http://www.huffingtonpost.com/erik-rasmussen/water-wars\_b\_844101.html)

For years experts have set out warnings of how the earth will be affected by the water crises, with millions dying and increasing conflicts over dwindling resources. They have proclaimed -- in line with the report from the US Senate -- that the water scarcity is a security issue, and that it will yield political stress with a risk of international water wars. This has been reflected in the oft-repeated observation that water will likely replace oil as a future cause of war between nations. Today the first glimpses of the coming water wars are emerging. Many countries in the Middle East, Africa, Central and South Asia -- e.g. Afghanistan, Pakistan, China, Kenya, Egypt, and India -- are already feeling the direct consequences of the water scarcity -- with the competition for water leading to social unrest, conflict and migration. This month the escalating concerns about the possibility of water wars triggered calls by Zafar Adeel, chair of UN-Water, for the UN to promote "hydro-diplomacy" in the Middle East and North Africa in order to avoid or at least manage emerging tensions over access to water. The gloomy outlook of our global fresh water resources points in the direction that the current conflicts and instability in these countries are only glimpses of the water wars expected to unfold in the future. Thus we need to address the water crisis that can quickly escalate and become a great humanitarian crisis and also a global safety problem.

#### Specifically—Indo-Pak war

**Bokhari 10** – assistant editor at Dawn (Ashfak, 01/18, “Water dispute and war risk,” http://archives.dawn.com/archives/24980)

In March last year, a group of more than 20 different UN bodies warned that, since water has become the latest cause to stoke tensions between India and Pakistan, the world may be perilously close to its first water war. “Water is linked to the crises of climate change, energy and food supplies and prices, and troubled financial markets,” said their report. “Unless their links with water are addressed and water crises around the world are resolved, other crises may intensify and local water crises may worsen, converging into a global water crisis and leading to political insecurity and conflict at various levels.” The first attempt to use water as a military tool was made in 1503 when Leonardo da Vinci and Machiavelli planned to divert Amo River away from Pisa during the conflict between Pisa and Florence. On January 28, 2009, President Asif Ali Zardari in an article in Washington Post warned “The water crisis in Pakistan is directly linked to relations with India. Its resolution could prevent an environmental catastrophe in South Asia, but failure to do so could fuel the fires of discontent that may lead to extremism and terrorism.” In early 2009, Pakistan was seen being on the brink of a water disaster, as the availability of water which was 5,000 cubic meters per capita 60 years ago has declined to 1,200 cubic meters. By 2020, it may fall to about 800 cubic meters per capita. In recent weeks water shortage has worsened from 30 to 40 per cent because of the drought that may reduce the Rabi crops produce by 20 per cent. In case the drought continues, the country may get 21- 22 million tonnes of wheat against the target of 25 million tonnes. The first phase of the Baglihar dam, a 450-MW hydroelectric power project initiated in the 1990s, was completed on October 10, 2008. Inaugurating the project, Indian Prime Minister Manmohan Singh noted “It is a matter of satisfaction that the reconstruction programme… [entailing] 67 projects is well under way with 19 projects completed, one of which is the Baglihar project that I inaugurate today.” Zardari reacted angrily saying India`s move to block Pakistan`s water supply from the Chenab River could harm their relations. “Manmohan Singh had assured me in our meeting in New York that his country is seriously committed to our (Indus) water sharing treaty,” he said, referring to their meeting on the sidelines of the UN General Assembly a month before. “We expect him to stand by his commitment.” India didn`t take steps to abide by Singh`s commitment or provisions of the Indus treaty. Meanwhile, talk about water war had been gaining currency. On November 3, 2008, PML-Q chief and former premier Chaudhry Shujaat Hussain said the water crisis between Pakistan and India could become more serious than terrorism and can result in a war. Mr Majid Nizami, chief editor of a group of newspapers, observed in June last that the water dispute with India could trigger a war. “Pakistan can become a desert within the next 10 to 15 years. We should show upright posture or otherwise prepare for a nuclear war,” he said.

#### Extinction

Greg Chaffin 11, Research Assistant at Foreign Policy in Focus, July 8, 2011, “Reorienting U.S. Security Strategy in South Asia,” online: http://www.fpif.org/articles/reorienting\_us\_security\_strategy\_in\_south\_asia

The greatest threat to regional security (although curiously not at the top of most lists of U.S. regional concerns) is the possibility that increased India-Pakistan tension will erupt into all-out warthat could quickly escalate into a nuclear exchange. Indeed, in just the past two decades, the two neighbors have come perilously close to war on several occasions. India and Pakistan remain the most likely belligerents in the world to engage in nuclear war. Due to an Indian preponderance of conventional forces, Pakistan would have a strong incentive to use its nuclear arsenal very early on before a routing of its military installations and weaker conventional forces. In the event of conflict, Pakistan’s only chance of survival would be the early use of its nuclear arsenal to inflict unacceptable damage to Indian military and (much more likely) civilian targets. By raising the stakes to unacceptable levels, Pakistan would hope that India would step away from the brink. However, it is equally likely that India would respond in kind, with escalation ensuing. Neither state possesses tactical nuclear weapons, but both possess scores of city-sized bombs like those used on Hiroshima and Nagasaki. Furthermore, as more damage was inflicted (or as the result of a decapitating strike), command and control elements would be disabled, leaving individual commanders to respondin an environment increasingly clouded by the fog of war and decreasing the likelihood that either government (what would be left of them) would be able to guarantee that their forces would follow a negotiated settlement or phased reduction in hostilities. As a result any suchconflict would likely continue to escalateuntil one side incurred an unacceptable or wholly debilitating level of injury or exhausted its nuclear arsenal. A nuclear conflict in the subcontinentwould havedisastrous effects on the world as a whole. In a January 2010 paper published in Scientific American, climatology professors Alan Robock and Owen Brian Toon forecast the global repercussionsof a regional nuclear war. Their results are strikingly similar to those of studies conducted in 1980 that conclude that a nuclear war between the United States and the Soviet Union wouldresult in acatastrophic and prolonged nuclear winter,which could very well place the survival of the human race in jeopardy. In their study, Robock and Toon use computer models to simulate the effect of a nuclear exchange between India and Pakistan in which each were to use roughly half their existing arsenals (50 apiece). Since Indian and Pakistani nuclear devices are strategic rather than tactical, the likely targets would be major population centers. Owing to the population densities of urban centers in both nations, the number of direct casualties could climb as high as 20 million. The fallout of such an exchange would not merely be limited to the immediate area. First, the detonation of a large number of nuclear devices would propel as much as seven million metric tons of ash, soot, smoke, and debris as high as the lower stratosphere. Owing to their small size (less than a tenth of a micron) and a lack of precipitation at this altitude, ash particles would remain aloft for as long as a decade, during which time the world would remain perpetually overcast. Furthermore, these particles would soak up heat from the sun, generating intense heat in the upper atmosphere that would severely damage the earth’s ozone layer. The inability of sunlight to penetrate through the smoke and dust would lead toglobal cooling by as much as 2.3 degrees Fahrenheit. This shift in global temperature would lead to more drought, worldwide food shortages, and widespread political upheaval. Although the likelihood of this doomsday scenario remains relatively low, the consequences are dire enough to warrant greater U.S. and international attention. Furthermore, due to the ongoing conflict over Kashmir and the deep animus held between India and Pakistan, it might not take much to set them off. Indeed, following the successful U.S. raid on bin Laden’s compound, several members of India’s security apparatus along with conservative politicians have argued that India should emulate the SEAL Team Six raid and launch their own cross-border incursions to nab or kill anti-Indian terrorists, either preemptively or after the fact. Such provocative action could very well lead to all-out war between the two that couldquickly escalate.

#### Resource wars will become frequent and severe—robust academic basis

**Jawan, 12** [S Naji, Faculty of Human Ecology, Universiti Putra Malaysia, ‘Resource Wars’ in the Post-Cold War Era: The Persian Gulf Oil, US, and the Iraq War Arts and Social Sciences Journal, Vol. 2012: ASSJ-49, http://astonjournals.com/manuscripts/Vol2012/ASSJ-49\_Vol2012.pdf]

\*\*\*Cites **Yergin**, Pulitzer Prize winning economic researcher. and chairman of Cambridge Energy Research Associates and Billon (MBA Paris, PhD Oxford) is Associate Professor at the University of British Columbia with the Department of Geography and Klare [professor](http://en.wikipedia.org/wiki/Professor) of Peace and World Security Studies, at Hampshire College, author of *Resource Wars* and *Blood and Oil: The Dangers and Consequences of America's Growing Petroleum Dependency* (Metropolitan) and Dr. Susanne Peters the Academic Director of the Kent State University and teaches International Relations and European Politics\*\*\*

2. ‘Resource Wars’ and Conflict for Oil Natural resources have always played a key role in conflicts and wars taking place. These struggles are often caused by the scarcity and immense value resources such as diamonds, copper, gold, water, timber, arable land, and oil [1]. Among them, the role of petroleum as a vital commodity for the industrial world, and due to its global influences has been most remarkable, and as Yergin [8] noted, the history of petroleum has always been associated with the history of struggle and war. Indeed, “petroleum is unique among the world’s resources” [1]. There is this view that, the 21st century, similar to the previous century will be a “century of oil” and from this view, access to oil as a global resource has always included those issues that have formed battles [9]. In fact, the new resource wars in the world will be a significant problem in the future. It will be because of the oil supply crisis as a natural resource. It will occur because of the declining oil reservoirs as well as the unbalanced distribution of these resources in particular along the North-South axis [4]. Billon [3] believes that the natural resources have always been introduced as a crucial motive of conflicts and wars. He refers to the more important role of these resources in creating wars in the 1990s and argues that some interventions take place because of the lust for valuable resources. He also believes that, on the other hand, the political and economic vulnerabilities of dependent countries on resources are the main reason for the importance of resources in creating wars. In this respect, the geopolitical thinking in the west, concerning resources, has been established over an equally strong relationship amongst power, trade, and war which has been tied strongly to maritime navigation and overseas resources too. In the past, this geopolitical thought had been reflected in the view that “whoever commands the oceans commands the trade of the world, and whoever commands the trade of the world commands the riches of the world, and whoever is master of that commands the world itself.” With growing dependence of the western countries on imported materials during the 19th century, indeed, great western countries expanded their command over raw materials throughout the world. In this commentary, some classic geopolitical concepts such as “vital space” or Lebensraum for accessing further resources and Mackinder’s “Heartland” in warning about the role of railways in control of resources are very important [3]. Oil is the most significant overseas resource, and Billon [3], showed the key role it played during World War I and World War II. The vulnerability of those resources at that time was also revealed so that during the Cold War, ultimately, it was focused “on the vulnerability of rising resource supply dependence” which required various strategies to secure the needed resources in the forms of military deployments, accumulation of resources, diplomatic activities, coup d’état, etc. [3]. In this respect, four important events have also been mentioned by Billon, which have influenced the oil strategies and history; the decolonization process, Suez crisis in 1956, the 1973 Arab oil embargo, and the Islamic revolution of Iran in 1979. He also mentioned two important events, the end of the Cold War and the Iraqi invasion of Kuwait, as events that increased the importance of energy security and vulnerability of these resources. Billon, on the other hand, indicates the necessity of energy security for the oil producer countries. For him, always one of the strategic http://astonjournals.com/assj 3 Arts and Social Sciences Journal, Vol. 2012: ASSJ-49 concerns for importing and exporting countries relates to geopolitics of energy security. In that regard, he also considers the natural resources revenues as a strong instrument to create wars in the post-Cold War era. This view is similar to Huntington’s idea that oil-rich countries in the Persian Gulf became money-rich and then weapons-rich, and then, several wars finally occurred between Arab and Israel [10]. Peters [4], however, in his work “Coercive Western Energy Security Strategies: ‘Resource Wars’ as a New Threat to Global Security,” explains the conditions of the Cold War era concerning resource wars and believes that, in 1986, a list of 12 wars and skirmishes in the 20th century was presented indicating that all were started by clashes over access to resources, renewable or non-renewable. For him, the 1991 Gulf War was the first interstate war on a major scale in the post-Cold War era, which was fought to control the oil of the region. From his view, oil is the most important non-renewable resources. In particular, it is a vital commodity in the industrial countries, with industrialized economies, particularly in agriculture and transportation sectors. As evidence, he refers to demand rates of consumer countries and indicates that demand is growing significantly and will continue to do so especially in the forthcoming decades such that in accordance with the international energy agency’s (IEA) request for oil between 1997 and 2020 which is anticipated to rise with a growth rate of 1.9% per year [4]. In this respect and according to an international group of petroleum specialists (Association for the Study of Peak Oil, ASPO), researchers will witness the peak of world supply of oil in early 2010, and as a consequence, the energy prices will grow, and ultimately the world will face economic upheaval. Peters examines in fact, the resources conflict from the South–North perspectives and argues that 67.3% of all proven oil reservoirs has been covered by the G-77 and OPEC, and Arab league covers nearly 60% of world oil reservoirs. On the other hand, the demands of the developing countries are growing too. It is expected to rise almost three-fold as fast as in the developed world. It is estimated that from 43% for today to 55% of total global consumption by 2020. Therefore, conflict between South and North will be built over the distribution of energy resources among the energy-producing states and the energy-consuming states. There is, indeed, this view that, wars are generally the result of a multifaceted combination of motives, and the most important motivation is the concerns that are related to access and control of resources [4]. It is interesting that Peters refers to two wars in the post-Cold War as “resource wars,” which were the result of the US coercive strategy in order to protect energy supplies. In this respect, however, Singh refers to three wars in the Persian Gulf; two Iraq wars and the Afghanistan war that took place between two Iraq wars. He, in reference to the Afghanistan war, presents this question: “Is the NATO military presence in South-West Asia only to fight terrorism and introduce democracy or is there a hidden agenda like dominating the energy sources for the use of the west? Are they spending billions of dollars to maintain a large number of troops not only in Iraq but also in the neighborhood for political philanthropy, like establishing democracy, or is it an investment for energy security in the future?” [11]. Singh, with reference to some studies emphasizes that bypassing the National Oil Company of Iraq in support of free market of oil was the aim of neo-conservatives, as it would reduce the domination of OPEC and other oil producers over the international oil market. He refers to production and consumption of oil for the period 1970–2003, and emphasizes the US dependency on foreign oil. He also stresses three significant issues: a continuous decrease in oil production, growing oil consumption, and as a result constantly rising dependence upon foreign imported oil. This increasing dependence has been shown to grow from 12.15% in 1970 to 43.7% in 1990 and to 65.1% in 2003. From this point of view, as the oil reserves of the US, South-East Asia and North Sea are declining; all the major consumers’ dependence is increasing, especially on the Persian Gulf oil because of their future needs. This increase for the US is from 2.3 million barrels per day (mbd) in 2003 to 4.2 mbd by 2020. He also refers to declining oil production in the US from 9.5 mbd in 1970 to 6.72 mbd in 1994 and to 5.72 mbd in 2003. There is also decline in Norway, UK, and Indonesia. Clearly, the oil reservoirs and productions of the Persian Gulf area will increasingly be vital for global energy security because the decreasing oil production and limited reservoirs in the OECD states [11]. Another commentator, Klare [12] discusses three main resources in his work: energy resources (oil and natural gas), water, and valuable timber and minerals, and refers to the importance of these vital materials in the outbreak of conflicts across the world. Klare reveals his own worry about these conflicts and believes that it is a necessary issue to find and plan ways to resolve the issue of the competition over natural resources, because controlling specific natural resources is a national security theme of many countries and “something worth fighting for.” In this respect, he divides the reasons of conflicts after the Cold War to two periods and says that fighting in Central Africa, Kashmir, and the former Yugoslavia focused the global community on preventing ethnic conflict in the early 1990s, while in the next few years, violence in Africa occurred in the fight to control the copper mines, diamond fields, and farmlands. Concerning oil and gas, however, Klare pointed out the mechanism of supply and demand as the starting point of the pressure on http://astonjournals.com/assj 4 Research Article energy reserves. He believes that increasing the populations and expanding the economic activities caused increasing need for vital materials, and demands for these materials, especially oil and gas, has always risen. Based on this viewpoint, “as shortages of critical materials rise in frequency and severity, the competition for access to the remaining supplies of these commodities will grow more intense” [12]. He refers to a report of the US Department of Energy and declares that the world oil consumption will increase from about 77 mbd in 2000 to 110 mbd in 2020 (about 43%). In this condition, the world consumption will rise to approximately 670 billion barrels of oil only from 2000 till 2020. It means that it will include nearly two-thirds of the proven oil reservoirs of the world. In this respect, it seems that the production of petroleum will not be able to keep up with global demands and as a result the world will face an unbalanced global supply and demand [12].

#### Goes nuclear

**Wooldridge 9** – political writer and former lecturer at Cornell University (Frosty, “Humanity galloping toward its greatest crisis in the 21st century”

http://www.australia.to/index.php?option=com\_content&view=article&id=10042:humanity-galloping-toward-its-greatest-crisis-in-the-21st-century&catid=125:frosty-wooldridge&Itemid=244)

It is clear that most politicians and most citizens do not recognize that returning to “more of the same” is a recipe for promoting the first collapse of a global civilization. The required changes in energy technology, which would benefit not only the environment but also national security, public health, and the economy, would demand a World War II type mobilization -- and even that might not prevent a global climate disaster. Without transitioning away from use of fossil fuels, humanity will move further into an era of resource wars (remember, Africom has been added to the Pentagon’s structure -- and China has noticed), clearly with intent to protect US “interests” in petroleum reserves. The consequences of more resource wars, many likely triggered over water supplies stressed by climate disruption, are likely to include increased unrest in poor nations, a proliferation of weapons of mass destruction, widening inequity within and between nations, and in the worst (and not unlikely) case, a nuclear war ending civilization.

#### The United States Federal Government should expand loan guarantees for small modular Liquid Fluoride Thorium Reactors in the United States.

#### Small modular thorium reactors are key – the tech is ready

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

SO, IF YOU WERE GOING TO DESIGN and build a new nuclear reactor from scratch, what would it look like? First of all, you’d make it small. The old antinuke saw says, “Nuclear reactors come in only one size: extra large.” But compact modular reactors that can be prefabricated, transported by shipping container, and assembled on site are now seen by many experts as the future of nuclear energy. “If you go small, and manufacture reactors like Henry Ford did cars, there’s a host of advantages,” Tom Sanders told me shortly before he took over as president of the American Nuclear Society in 2009. (He is now its president emeritus.) “You could use automated manufacturing processes instead of doing every weld individually, you could get the plants licensed in a two-year time frame instead of seven, and it’d be much cheaper on a per-kilowatt basis.” Virtually all the major nuclear vendors, including GE-Hitachi Nuclear Energy, Bechtel (a company not exactly renowned for miniaturization), Babcock & Wilcox, and Westinghouse (now owned by the Korean tech giant Toshiba) are developing small modular reactors (SMRs). These reactors can use uranium or thorium (or even plutonium), but thorium, with its higher efficiency, offers unique qualities that make it well suited for miniaturization. They produce less than 300 megawatts, the limit for an officially small reactor. Future versions that could fit on the back of a flatbed truck are envisioned at 60 or even 30 megawatts. Like mobile homes, SMRs can be manufactured centrally and assembled on site, facilitating financing and shortening the time to production; in theory, multiple SMRs could be combined to create a large generating station. Keeping the plants small and dispersed, though, makes them less tempting targets for would-be terrorists—as does fueling them with thorium. More important, they could produce energy at a lower price per kilowatt than conventional nuclear plants, bringing the cost of nuclear power more into line with low-cost coal production. Newly infatuated with what’s known as distributed power generation (lots of smaller reactors scattered in lots of places), the nuclear industry has finally realized that bigger is not always better. More compact and more affordable are good things; even better is the prospect that thorium-powered SMRs could help solve the problem of nuclear waste storage and disposal. Some ambitious nuclear designers have even started to dream up small, modular fast breeder reactors, which is a bit like trying to control a tiger by putting it in a smaller cage. Bringing these designs into commercial production could take a decade or more. The three main barriers to widespread deployment, as Philip Moor puts it, are the same that face any new nuclear plant: “Dirt, licensing, and money,” he told me. Moor heads up a special committee of the American Nuclear Society formed to examine the business and manufacturing issues around SMRs. The Savannah River Site, a nuclear industrial complex operated by the DOE near Augusta, Georgia, will supply the dirt (the real estate and infrastructure), and industry heavyweights like GE, Westinghouse, and Bechtel are lining up to provide the money, at least for demonstration projects. That leaves licensing. “Once we start the demonstration projects, we can start pursuing the license application,” said Sanders of the American Nuclear Society. But “we need something operating on the ground.” That’s hardly a slam dunk. It’s worth noting that building minireactors is not a new concept. GE actually started the Power Reactor Innovation Small Modular (PRISM) program back in 1981, and in 1994 the NRC issued a report that said the commissioners foresaw no impediments to licensing. The project was abandoned in 2001 and then got a second life in 2006. With huge new supplies of natural gas starting to reach the market, and coal plants still the least expensive form of power generation, new nuclear plants will continue to look expensive. And investors looking back at 30 years of nuclear dead ends are sure to be wary of new technological marvels, however promising. The history of nuclear power demonstrates that nothing is truly viable until the core starts chain-reacting. Still, thorium-powered SMRs offer the best way forward for new nuclear power and a potential solution for global warming. Smaller is beautiful, and in this case it could be more profitable as well. ---- SECOND, YOU’D MAKE YOUR NEW REACTOR a breeder, preferably a thermal breeder. The failure of fast breeders to fulfill their promise has not erased their appeal; it has just caused the quest for a fast breeder to go in (slightly) new directions. Breeders would be advantageous not only because, theoretically, you’d never run out of fuel, but also because you can use them to process nuclear waste from conventional reactors. At least in the United States, the question of how to store nuclear waste has no clear answer, and there may not be one for the next decade. Building self-sustaining breeder reactors would, as the nuclearati like to say, “close the fuel cycle”; little radioactive material would be left over to dispose of. Then you’d want to make your reactor inherently safe. Inherent safety — not to be confused with passive safety, a very different thing — is a term much beloved by nuclear engineers‘; It has been applied to just about every reactor design, including the uranium-fueled lightwater reactor and the sodium-cooled fast breeder, machines whose inherent safety is, to say the least, questionable. Traditionally, the solution to this problem has been external safeguards, also called overengineering: add more controls, more redundancy, more miles of piping, more plumbing and alarms and sensors and gauges, and the inherent twitchiness of the world’s most volatile energy source could be contained and controlled. Unfortunately, all that engineering brings more complexity, and complexity in itself adds risk. Virtually all the reactor accidents that have ever occurred have had one of two causes: either a fiendishly complex mechanism failed because of a simple mishap (like a loose chunk of zirconium) or a human being failed at the task of monitoring and managing a fiendishly complex mechanism. The only truly inherently safe reactor is a liquid-core reactor, like the molten salt reactor that was created at Oak Ridge in the 1960s. For the purposes of a reactor designer, liquid—whether it’s water, liquid metal, or some type of liquid fluoride — has a marvelous characteristic: it expands rapidly when it gets hot. All materials expand when heated, of course. In a liquid-core reactor, as the energy of the liquid rises, it expands and naturally, passively, slows down the reaction, making a runaway accident nearly impossible. In technical terms, this is known as a “negative temperature coefficient of reactivity.” That means that as the temperature rises (which typically is what happens when something goes wrong in a nuclear reactor), the reactivity goes down. When the reactivity goes down, the reactor is essentially turning itself off. Liquid fuels have several other characteristics that make them safer than conventional solid fuel reactors. This is where the benefits of thorium, which for a variety of reasons is uniquely well suited to liquid fuel reactors, extend beyond the nature of the element itself. No matter how you use it—in a light-water reactor, in a pebble bed reactor— thorium offers advantages over uranium. But in a liquid fuel reactor, that advantage is magnified. If you put high-octane gas in a 1975 Ford Pinto, you’ll see some marginal performance enhancement. To get the full benefit, though, you should put it in a Ferrari Testarossa. Using thorium in a liquid fuel reactor is similar: its unique qualities as an energy source are fully exploited. For example, in liquids—particularly in molten salts—fission products tend to be stable, making it easier to isolate and remove them. One of these fission products, xenon-135, is a nuclear poison that tends to build up in conventional reactors, slowing down the reactions. It renders the fuel unusable after only a small percentage of the potential energy has been used, and it’s hideously difficult to handle as part of the nuclear waste stream. In fluid fuels, because xenon forms a noble gas (one that is impervious to chemical reactions), xenon is easy to remove. In a LFTR it can be boiled off as a gas and processed while the reactor continues operating, reducing downtime and increasing the amount of the potential energy that can be extracted from the thorium fuel. A ton of thorium can produce energy equivalent to that produced by 200 tons of uranium in a conventional light-water reactor. Liquid fuels are also impervious to radiation damage, solving one of the thorniest problems in solid fuel reactors. Continuous bombardment by neutrons over periods of weeks or months wears down not only the solid uranium pellets in a light-water reactor but also the cladding (usually made of zirconium) that contains them. Because of radiation damage and the buildup of fission poisons like xenon, fuel rods age quickly; they have to be replaced every few years, even though only 3 to 5 percent of their energy has been consumed. Liquid fuels have one other characteristic that makes them ideal for reactor cores: they flow. Gravity, not elaborate control systems or socalled passive safety systems, gives LFTRs their ultimate protection against a serious nuclear accident. In a criticality accident (i.e., if the fission reaction in the core starts to get out of control), a specially designed freeze plug in the reactor vessel melts and the liquid core simply drains out of the reactor into an underground shielded container, like a bathtub when the drain plug is pulled. The fission reactions quickly cease, and (thanks to the expansive quality noted earlier) the fluid cools rapidly. Decay heat is contained harmlessly. Meltdown is impossible, and there are no solid fuel rods too radioactive to remove. Inherently safe, LFTRs pose less threat than light-water reactors, coal-fired power plants, oil refineries, or just about any other form of large energy or chemical plant. Built small and modular, they will be less expensive to build and operate than just about any other energy source. ---- FINALLY YOU’D FUEL YOUR SMALL, breeding, inherently safe, liquidcore reactor with thorium. I mentioned in chapters 1 and 2 many of thorium’s sterling qualities as a nuclear fuel; they bear reviewing. It is abundant. In fact, used properly, it’s effectively inexhaustible. It requires no special refining or processing beyond purifying it from the monazite ore in which it is most commonly found. It can be mined safely, with none of the tailings and other results of uranium mining that, in the early years of the Atomic Age, poisoned whole communities in Russia and the United States. It’s no good for making weapons. In fact, it’s not fissile at all. It requires a kind of nuclear alchemy to be transmuted into uranium-233, which is a more efficient and safe source of energy than U-235. Finally reactors based on thorium—or, rather, U-233, into which thorium transforms in a nuclear reactor—consume far more of the latent energy trapped inside the fuel, vastly reducing or even eliminating the problem of nuclear waste. In short, you’d build a liquid fluoride thorium reactor, or LFTR. LFTRs are the first truly revolutionary reactor design to come along since the development in the 1960s of the molten salt reactor, progenitor of the LFTR. LFTRs are designed with an outer blanket of liquid fluoride that contains dissolved thorium-232—thorium tetrafluoride, to be precise (a fluoride is simply a combination of fluorine and another element; tetrafluoride means four atoms of fluorine). The thorium is borne in a solution of lithium and beryllium fluorides that has maximum heat-transfer properties, making it a supremely efficient coolant. This radioactive cocktail surrounds a core of uranium-233 that is produced from the natural decay of Th-232 bombarded by neutrons. The neutron source, to start the reaction, is typically a small amount of fissile uranium, although the neutrons can also come from a particle accelerator, of the sort used in physics experiments to smash particles together. The blanket and inner core are in two concentric containers. It’s essentially a double boiler: the inner core, sheathed in an exotic alloy of a metal such as zirconium, contains the fissile U-233, and the outer shell, or blanket, contains the fertile thorium. In this simplified diagram of a liquid fluoride thorium reactor, thorium is converted to uranium-233, which sustains the fission reaction, heating a secondary liquid that powers a turbine to create electricity. (Brad Nielsen) Once the reactor core goes critical, the fission reactions in the core continuously throw off neutrons that keep the thorium, in the blanket, in a constant state of transformation, creating a virtuous cycle. Such a plant has two separate loops of piping: one carries the fertile thorium tetrafluoride salt, once it has been sufficiently bombarded to start the decay chain, into a decay tank from which U-233 can be transferred to the inner core; the other sends the hot U-233 salt from the core to a heat exchanger to drive a steam turbine.7 There are several variations on this basic design, which use various fluids to transfer heat from the reactor core to the turbine; suffice it to say that whichever is chosen, it will be significantly more efficient than a conventional nuclear plant. After passing through the heat exchanger, the second loop, carrying hot U-233 fuel salt, cycles back into the core, with a small secondary side stream passing through a reprocessor, where the fission products are removed, preventing them from poisoning the reaction, before being cycled back into the core for further fission reactions. Because the core is liquid, it operates at atmospheric pressure, meaning that the extremely thick-walled, pressurized vessels used in conventional reactors, which have an unfortunate tendency to blow their top, are unnecessary. Because LFTRs consume virtually all their nuclear fuel, the majority of the waste products are not long-lived fissile material but rather fission products, about 83 percent of which are safe within a decade. While LFTRs, like every other nuclear reactor, generate fission products that are highly radioactive, their half-lives tend to be measured in dozens of years, not thousands. The long-lived radioactivity of LFTR waste is one ten-thousandth that of a conventional reactor. The leftovers, a small fraction of the waste produced by conventional reactors, must be stored in radiation-proof geological sites for about three centuries, compared with ten thousand years for nuclear waste from conventional uranium reactors. In fact, LFTRs themselves make great garbage dumps for spent nuclear fuel: they can refine standard nuclear waste into LFTR by-products, essentially solving the currently intractable toxic waste storage problems that plague today’s nuclear power industry. Thorium Energy Alliance This schematic shows a full thorium power plant including a reactor vessel, drain tanks, and a Brayton-cycle turbine using supercritical carbon dioxide. (Thorium Energy Alliance) With their high negative temperature coefficient, LFTRs are impervious to sudden overheating. They’re also exquisitely tunable; the concentration of fuel in the outer blanket can be adjusted continually, making it easy to control the reactivity in the core. Finally, they can run practically forever. The reactions in a LFTR produce enough excess neutrons to breed their own fuel. LFTRs are the only type of reactor that can breed more fuel than they consume in the thermal, or lower-energy, spectrum. They have the virtues of fast breeders without the volatility. Here it is useful to think back to the nature of fission and neutron absorption. In today’s conventional reactors, the great majority of the fuel is U-238, which transmutes to the transuranic element plutonium- 239 when the U-238 absorbs a single neutron. Thorium-232, by contrast, requires five neutrons to become a transuranic (neptunium-237, which can be safely burned down, or processed, in the reactor). That too makes LFTRS inherently safer than solid-fuel uranium reactors. While liquid-core reactors can be built to operate without moderators, in some LFTR designs the core does use moderators — typically graphite rods, just as in a conventional uranium reactor. Just as the LFTR has unique qualities that make it superior to light-water reactors, though, U-233 has some distinct advantages over uranium- 235, the fissile material that runs the vast majority of the world’s nuclear power stations today. U-233 displays a quality that nuclear engineers love: high neutron economy, usually expressed as q in physics equations. That means that an atom of U-233, after absorbing a stray neutron and fissioning, produces on average 2.16 neutrons. Since one neutron is required to continue the chain reaction, 1.16 neutrons are freed up to produce new fuel. Overall, LFTRs are 200 to 300 times more fuel efficient than standard reactors. They are safer, simpler, smaller, less expensive to build, and less expensive to run to produce electricity on a cost-per-kilowatt basis.

#### And, new tech developments make thorium LFTR’s expandable

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Small modular LFTRs can be mass produced. Commercialization of technology leads to lower costs as the number of units increase. Experience benefits arise from work specialization, new processes, product standardization, new technologies, and product redesign. Business economists observe that doubling the number of units produced reduces cost by a percentage termed the learning ratio, seen in the early aircraft industry to be 20%. Today Moore’s law in the computer industry illustrates a learning ratio of 50%. In The Economic Future of Nuclear Power University of Chicago economists more conservatively estimate the learning ratio is 10% for nuclear power reactors. Units produced The learning curve In this illustration, the cost of the 1024th LFTR would be about 35% the cost of the first commercial LFTR. Some engineers advocate economy-of-scale to justify large reactors, but this analysis shows that 100 MW units would have a 30% costadvantage over 1000 MW units because of the ten times more production experiences. Boeing 737 production line Boeing made 477 airplanes in 2011 costing up to $330 million each. Boeing, capable of manufacturing $200 million units daily, is a model for LFTR production. Airplane manufacturing has many of the same critical issues as manufacturing nuclear reactors: life safety, reliability, strength¶ of materials, corrosion, regulatory compliance, documentation, design control, supply chain management, and cost, for example. Reactors of 100 MW size costing $200 million can similarly be factory produced. Manufacturing more, smaller reactors traverses the learning curve more rapidly. Producing one per day for 3 years creates 1,095 production experiences, reducing costs by 65%. Documentation control integrated with manufacturing saves costs and increases accuracy. New manufacturing techniques are enabled with CAM (computer aided manufacturing), automatically converting designs to manufacturing instructions for machine tools and industrial robots. CAM can vary manufacturing parts and processes to produce a variety of units on one production line. In the Boeing photograph above, observe that the wing tips are not identical on all units. Ongoing research will lead to lower LFTR costs. Cost reductions are presaged by current engineering research. Compact, thin-plate heat exchangers may reduce fluid inventories, size, and cost. Possible new materials include silicon-impregnated carbon fiber with chemical vapor infiltrated carbon surfaces, and higher temperature nickel alloys. Operating at 950°C can increase thermal/electrical conversion efficiency beyond 50%. Such high temperatures can improve efficiency for water dissociation to create hydrogen, to lower manufacturing costs of synthetic fuels such as methanol or dimethyl ether that can substitute for gasoline or diesel oil. Initial fissile material quantities and costs are low. A 100 MW LFTR requires only about 100 kg of fissile material, such as U-233 or U-235, to start up. Thereafter it is fueled by thorium, or thorium and enriched uranium in DMSR. A LWR or LMFBR requires 5 times this, adding to capital costs. Thorium fuel is plentiful and inexpensive. One ton of thorium can power a 1,000 megawatt LFTR for a year - enough power for a city. Just 500 tons would supply all US electric energy for a year. Fuel costs at $300,000 per ton for thorium would be $0.00004/kWh, compared to coal at $0.03/kWh. Uranium enrichment costs are low. The expanding worldwide fleet of LWRs increases demand for uranium and also for the enrichment services to convert it from 0.7% to 4% U-235. Some LFTRs may require enriched uranium only for startup. Designs such as DMSRs will require a continued supply of enriched uranium, but less than 25% of the amount used by LWRs. Fuel fabrication costs are low. Unlike LWRs, there are no costs for producing high quality zirconium tube fuel rods to contain UO2 pellets and their fission products for centuries. Unlike pebble bed reactors using TRISO particle fuel, there is no cost for triple-coating millions of UO2 particles designed to retain fission products within the three redundant layers. The LFTR fuel supply form might be solid UF4 crystals or gaseous UF6, which are already intermediate, steps in the production of solid UO2 used in LWRs. New control system technologies can reduce labor costs. The number of people required to operate today’s LWRs is higher than for other forms of power production. Nuclear power plants operate 24x7, and each job employs 6 people: 4 for the 4 work shifts per week, 1 for vacation and sick leave, and 1 for training time, so labor costs mount up. In my visits I observed there are more than 1000 employees per GW of power output, adding about 1 cent/kWh to electricity costs. Information systems and control systems technologies have improved immensely since LWRs were designed in the 1970s. Safety critical software techniques enable low-labor-cost operation of aircraft, helicopters, and rapid transit. Reducing direct operator control of reactors can also avoid mistakes, such as the series of operator errors that led to the Chernobyl disaster. Security guard costs should be proportional to the possible damage threat, much lower with a non-pressurized LFTR. Even US ICBMs in missile silos were guarded with remote electronic surveillance. Transmission line costs are less with distributed LFTRs. Much of the costs associated with multi-GW power plants are for transmission lines to transport power hundreds of miles on low- loss high-voltage direct-current (HVDC) lines. Fewer transmission lines are required when 100 MW power sources such as LFTRs are near cities and manufacturing centers. Costs for HVDC lines are roughly $1 million per mile, so the costs for energy transmission over 1,000 miles is roughly 1 cent/kWh. The program objective must be energy cheaper than coal. For all the above reasons, low costs of $2/W and 3 cents/kWh is an achievable objective. A $2/watt capital cost contributes $0.02/kWh to the power cost, assuming a 40 year life, 8% interest rate, and 90% capacity factor. With plentiful, inexpensive thorium fuel, LFTR can generate electricity at <$0.03/kWh, underselling power generated by burning coal. Producing one LFTR of 100 MW size per day could phase out all coal-burning power plants worldwide in 38 years, ending 10 billion tons of CO2 emissions from world coal plants now supplying 1,400 GW of electric power. Low LFTR costs are crucial to this coal replacement strategy, achievable if cost objectives are maintained at every design choice. Less expensive electric power will check global warming by dissuading all nations from burning coal. It will also help developing economies to improve their prosperity, encouraging lifestyles with sustainable birthrates. Keeping LFTR energy costs cheaper than coal is critical to achieving the social and environmental benefits. Cost challenges can be met at the R&D stage. There are cost challenges for LFTR development. Meeting the production cost objectives of $2/W and 3 cents/kWh requires a well-executed research and development program. Corporations with deep pockets may develop advanced nuclear power, as evidenced by Bill Gates’ investment in Terrapower’s LMFBR reactor, building on prior US $16 billion R&D expenditures. There is an opportunity for substantial government or philanthropic investment in LFTR R&D to keep ultimate production costs low by removing amortization of imprecise R&D costs. Public investment in energy R&D is a much more effective public policy than ongoing alternative energy production subsidies being paid today. ¶

#### And, the level of investment is key

The Economist, 09 [Nuclear's next generation inside story: A group of six new blueprints for nuclear power stations promise advances in safety and efficiency. How do they differ from existing designs?, <http://www.economist.com/node/15048703>]

Dr Ferguson thinks the prospects of the entire generation-IV programme are contingent on the level of investment allocated to nearer-term projects. “Do we commit to generation III or do we leapfrog to generation IV?” he asks. Two important considerations for answering his question are regulatory compliance and economic viability. With regard to the former, the NEA's Multinational Design Evaluation Programme is considering an international licensing scheme to standardise safety requirements for the new reactors. As for the latter, the success of generation IV reactors is likely to hinge on large amounts of government support. In the near term this support should take the form of increased research-and-development funding, says Dr Stacey of Georgia Tech. In the longer term, governments have an important role to play in the provision of loan guarantees, which are vital for overcoming engineering and “first of a kind” risks, says Joe Turnage at Unistar, a commercial nuclear joint-venture between Constellation Energy, an American utility, and EDF, a French one. But whatever the next generation of nuclear power-stations looks like, it is clear that the research being done around the world to develop such a variety of new reactors, rather than new nuclear weapons, has fulfilled Eisenhower's wish, back in 1953, that “the miraculous inventiveness of man shall not be dedicated to his death, but consecrated to his life.”

#### Loan guarantees now, but they are insufficient

Squassoni 12 Sharon, Director and Senior Fellow of the Proliferation Prevention Program at CSIS, “NUCLEAR POWER IN THE GLOBAL ENERGY PORTFOLIO”, Federation of American Scientists, February, www.fas.org/pubs/\_docs/Nuclear\_Energy\_Report-lowres.pdf

The U.S. nuclear industry has singled out government loan guarantees as essential because the private market finds loans for nuclear power plants to be too risky, and U.S. utilities are too small to take on a bigger equity to debt ratio, which would lower the cost of capital, a key element in the cost of the new plants. Under the loan guarantee program, the U.S. Treasury will guarantee 100 percent of a loan which is limited to 80 percent of the construction costs. This effectively transfers the risk of cost overruns due to lengthier construction times from project owners to the taxpayer. Congress appropriated $18.5 billion in loan guarantees for nuclear power facilities, and President Obama has recommended tripling this to $54 billion. This still falls far short of the $122 billion in requests. Industry sources suggest DOE will be able to support no more than 2-4 reactors, given costs of $5 billion to $12 billion per reactor. e Department of Energy awarded the first loan guarantee to the Vogtle reactor project in Georgia (over $8 billion) in 2010.

Federal loan guarantees causes market expansion – catalyzes capital investment

I21CE 11 Institute for 21st Century Energy, Mission of the U.S. Chamber of Commerce Institute for 21st Century Energy is to unify policymakers, regulators, business leaders, and the American public behind a common sense energy strategy to help keep America secure, prosperous, and clean, "Commit to and Expand Nuclear Energy Use", 2011 is copyright date, www.energyxxi.org/commit-and-expand-nuclear-energy-use

Nuclear power is currently an emissions-free source of 20% of America’s electricity supply, despite our not having licensed the construction of a nuclear power facility in nearly 30 years. Expansion of new nuclear power assets is essential to meet our projected growing demand while mitigating our emissions of CO2. As required by law, the federal government must provide authorized fiscal incentives for new nuclear power plants. We must solve our long-term nuclear waste challenges and aggressively expand efforts to recycle used nuclear fuel. Nuclear power is the nation’s largest emissions-free source of electricity. From a life-cycle perspective—including the impacts of uranium mining, uranium enrichment, fuel fabrication, plant construction, and fuel disposal—nuclear power offers a huge emissions advantage over any other large-scale method of baseload power generation and is on par with renewable sources. Nuclear power currently supplies about 20% of America’s electricity supply. America’s 104 operating nuclear power reactors are also the cheapest source of baseload electricityon a per-kilowatt-hour basis because operational and fuel costs are comparatively low. Although the existing nuclear units are successfully renewing their operating licenses for an additional 20 years, new nuclear power plants are essential to meet growing demand while avoiding GHG emissions. New nuclear power plants are capital-intensive, requiring an estimated $6–8 billion (2008 dollars) per plant. The U.S. electric power sector consists of many relatively small companies that do not have the size, financing capability, or financial strength to fund power projects of this scale on their own, in the numbers required. Outside financial support is necessary. The loan guarantee program authorized by EPAct2005 is a crucial tool to enable utilities to finance the construction of new reactors by increasing access to capital and enabling a higher share of leveraged debt. DOE estimates that by enabling a utility to rely more heavily on private debt than more expensive equity, a federal loan guarantee may save the ratepayers nearly 40% in the cost of power from a new nuclear plant. A well-managed loan guarantee program will be funded by project applicants and not require any expenditure of government funds. Unfortunately, the loan guarantee program has not been implemented effectively by the DOE, and the $18.5 billion in loan volume authorized by Congress for nuclear power projects is inadequate, given the estimated cost of a new nuclear power plant. That loan volume will support, at best, two, or three new projects. The current program should be expanded, and at the appropriate time merged with the Clean Energy Bank of the United States discussed earlier. The time it takes to license and build a nuclear power plant—now estimated at a minimum of eight years—is one reason the financing costs are high. The Nuclear Regulatory Commission (NRC) estimates it will take three and one-half years to review the first wave of new license applications for new designs. This period must be reduced for subsequent applications without compromising safety, and Congress must ensure the NRC has adequate resources to process license applications as expeditiously as possible. The regulatory and licensing framework has improved significantly since the 1980s, when we saw completed plants sit idle while awaiting issuance of operating licenses, but the NRC has yet to issue a Construction and Operating License under the new process. Project sponsors and investors have significant questions about whether the new process will deliver timely approvals. Delays in starting up a completed plant will subject its owners to substantial financial costs. The standby support program, established in EPAct2005, could be an effective insurance policy for nuclear plant owners against delays in the regulatory process or from litigation outside of the plant owner’s control. While this is a potentially useful tool to encourage first-movers to test the process, several changes are necessary to broaden the scope of the coverage. As currently structured, the statutory liability cap is now too low and does not reflect today’s market costs.

#### And, loan guarantees reduce financial uncertainty and boost investment

Adams 10—Publisher of Atomic insights Was in the Navy for 33 years Spent time at the Naval Academy Has experience designing and running small nuclear plants (Rod, Concrete Action to Follow Strongly Supportive Words On Building New Nuclear Power Plants, atomicinsights.com/2010/01/concrete-action-to-follow-strongly-supportive-words-on-building-new-nuclear-power-plants.html)

Loan guarantees are important to the nuclear industry because the currently available models are large, capital intensive projects that need a stable regulatory and financial environment. The projects can be financed because they will produce a regular stream of income that can service the debt and still provide a profit, but that is only true if the banks are assured that the government will not step in at an inopportune time to halt progress and slow down the revenue generation part of the project. Bankers do not forget history or losses very easily; they want to make sure that government decisions like those that halted Shoreham, Barnwell’s recycling facility or the Clinch River Breeder Reactor program are not going to be repeated this time around. For the multi-billion dollar projects being proposed, bankers demand the reassurance that comes when the government is officially supportive and has some “skin in the game” that makes frivolous bureaucratic decisions to erect barriers very expensive for the agency that makes that decision. I have reviewed the conditions established for the guarantee programs pretty carefully – at one time, my company ([Adams Atomic Engines, Inc.](http://www.atomicengines.com)) was considering filing an application. The loan conditions are strict and do a good job of protecting government interests. They were not appropriate for a tiny company, but I can see where a large company would have less trouble complying with the rules and conditions. The conditions do allow low or no cost intervention in the case of negligence or safety issues, but they put the government on the hook for delays that come from bad bureaucratic decision making.

#### Government support is vital-~--it overcomes financial barriers to nuclear that the market cannot

Yanosek 12 Kassia, entrepreneur-in-residence at Stanford University’s Steyer-Taylor Center for Energy Policy and Finance and a private equity investor in the energy sector as a principal at Quadrant Management and Founder of Tana Energy Capital LLC, " Financing Nuclear Power in the US", Spring, energyclub.stanford.edu/index.php/Journal/Financing\_Nuclear\_Power\_by\_Kassia\_Yanosek

Over the course of the last decade, it appeared that concerns about carbon emissions, aging coal fleets, and a desire for a diversified generation base were reviving the U.S. utility sector interest in building new nuclear plants. Government and companies worked closely on design certification for Generation III reactors, helping to streamline the licensing process. New loan guarantees from the federal government targeted for nuclear projects were created as part of the 2005 Energy Policy Act. Consequently, dozens of projects entered the planning stages. Following more than 30 years in which no new units were built, it looked as if the U.S. nuclear industry was making significant headway. However, it is yet to be seen how many new nuclear projects will actually make it beyond blueprints due to one of the largest barriers to new nuclear construction: financing risk. Large upfront capital costs, a complex regulatory process, uncertain construction timelines, and technology challenges result in a risk/return profile for nuclear projects that is unattractive for the capital markets without supplementary government or ratepayer support. To many investors, nuclear seems too capital-intensive. Nuclear energy has attractive qualities in comparison to other sources of electricity. A primary motivation to pursue the development of nuclear energy in the U.S. has been its low operating fuel costs compared with coal, oil, and gas-fired plants. Over the lifetime of a generating station, fuel makes up 78% of the total costs of a coal-fired plant. For a combined cycle gas-fired plant, the figure is 89%. According to the Nuclear Energy Institute, the costs for nuclear are approximately 14%, and include processing, enrichment, and fuel management/disposal costs. Today’s low natural gas prices have enhanced the prospects of gas-fired power, but utilities still remain cautious about over-investing in new natural gas generation given the historical volatility of prices. Furthermore, nuclear reactors provide baseload power at scale, which means that these plants produce continuous, reliable power to consistently meet demand. In contrast, renewable energies such as wind or solar are only available when the wind blows or the sun shines, and without storage, these are not suitable for large-scale use. Finally, nuclear energy produces no carbon emissions, which is an attractive attribute for utilities that foresee a carbon tax being imposed in the near future. Given nuclear’s benefits, one may wonder why no new nuclear units have been ordered since the 1970s. This hiatus is in great part due to nuclear’s high cost comparative to other alternatives, and its unique set of risks. As a result, financing nuclear has necessitated government involvement, as the cost of nuclear typically exceeds that of the cost of conventional generation technologies such as coal and natural gas fired generation on a levelized cost of energy (LCOE) basis. LCOE represents the present value of the total cost of building and operating a generating plant over its financial life, converted to equal annual payments and amortized over expected annual generation, and is used to compare across different power generation technologies. For both regulated utilities and independent power producers, nuclear is unattractive if the levelized cost exceeds that of other technologies, since state utility commissions direct regulated utilities to build new capacity using the technology with the lowest LCOE. Furthermore, capital costs are inherently high, ranging in the billions or tens of billions of dollars, and are compounded by financing charges during long construction times. Without government support, financing nuclear is currently notpossible in the capital markets. Recently, Constellation Energy and NRG separately pulled the plug on new multi-billion dollar plants, citing financing problems. Projects, however, will get done on a one-off basis. Southern Company’s Vogtle Plant in Eastern Georgia is likely to be the sponsor of the first new generation to be constructed, taking advantage of local regulatory and federal support. Two new reactors of next-generation technology are in the permitting stage, which will bring online 2,200 megawatts (MW) of new capacity, and will cost $14 billion. The project will take advantage of tax credits and loan guarantees provided in the 2005 Energy Policy Act.

#### The impact is extinction

Kroenig, 12 [May 26th, Matthew Kroenig: Assistant Professor of Government, Georgetown University and Stanton Nuclear Security Fellow, Council on Foreign Relations, The History of Proliferation Optimism: Does It Have A Future? Prepared for the Nonproliferation Policy Education Center, <http://www.npolicy.org/article.php?aid=1182&tid=30>]

Proliferation Optimism: Proliferation optimism was revived in the academy in Kenneth Waltz’s 1979 book, Theory of International Politics.[[1]](#footnote-1)[29] In this, and subsequent works, Waltz argued that the spread of nuclear weapons has beneficial effects on international politics. He maintained that states, fearing a catastrophic nuclear war, will be deterred from going to war with other nuclear-armed states. As more and more states acquire nuclear weapons, therefore, there are fewer states against which other states will be willing to wage war. The spread of nuclear weapons, according to Waltz, leads to greater levels of international stability. Looking to the empirical record, he argued that the introduction of nuclear weapons in 1945 coincided with an unprecedented period of peace among the great powers. While the United States and the Soviet Union engaged in many proxy wars in peripheral geographic regions during the Cold War, they never engaged in direct combat. And, despite regional scuffles involving nuclear-armed states in the Middle East, South Asia, and East Asia, none of these conflicts resulted in a major theater war. This lid on the intensity of conflict, according to Waltz, was the direct result of the stabilizing effect of nuclear weapons. Following in the path blazed by the strategic thinkers reviewed above, Waltz argued that the requirements for deterrence are not high. He argued that, contrary to the behavior of the Cold War superpowers, a state need not build a large arsenal with multiple survivable delivery vehicles in order to deter its adversaries. Rather, he claimed that a few nuclear weapons are sufficient for deterrence. Indeed, he even went further, asserting that any state will be deterred even if it merely suspects its opponent might have a few nuclear weapons because the costs of getting it wrong are simply too high. Not even nuclear accident is a concern according to Waltz because leaders in nuclear-armed states understand that if they ever lost control of nuclear weapons, resulting in an accidental nuclear exchange, the nuclear retaliation they would suffer in response would be catastrophic. Nuclear-armed states, therefore, have strong incentives to maintain control of their nuclear weapons. Not even new nuclear states, without experience in managing nuclear arsenals, would ever allow nuclear weapons to be used or let them fall in the wrong hands. Following Waltz, many other scholars have advanced arguments in the proliferation optimist school. For example, Bruce Bueno de Mesquite and William Riker explore the “merits of selective nuclear proliferation.”[[2]](#footnote-2)[30] John Mearsheimer made the case for a “Ukrainian nuclear deterrent,” following the collapse of the Soviet Union.[[3]](#footnote-3)[31] In the run up to the 2003 Gulf War, John Mearsheimer and Steven Walt argued that we should not worry about a nuclear-armed Iraq because a nuclear-armed Iraq can be deterred.[[4]](#footnote-4)[32] And, in recent years, Barry Posen and many other realists have argued that nuclear proliferation in Iran does not pose a threat, again arguing that a nuclear-armed Iran can be deterred.[[5]](#footnote-5)[33] What’s Wrong with Proliferation Optimism? The proliferation optimist position, while having a distinguished pedigree, has several major problems. Many of these weaknesses have been chronicled in brilliant detail by Scott Sagan and other contemporary proliferation pessimists.[[6]](#footnote-6)[34] Rather than repeat these substantial efforts, I will use this section to offer some original critiques of the recent incarnations of proliferation optimism. First and foremost, proliferation optimists do not appear to understand contemporary deterrence theory. I do not say this lightly in an effort to marginalize or discredit my intellectual opponents. Rather, I make this claim with all due caution and with complete sincerity. A careful review of the contemporary proliferation optimism literature does not reflect an understanding of, or engagement with, the developments in academic deterrence theory in top scholarly journals such as the American Political Science Review and International Organization over the past few decades.[[7]](#footnote-7)[35] While early optimists like Viner and Brodie can be excused for not knowing better, the writings of contemporary proliferation optimists ignore the past fifty years of academic research on nuclear deterrence theory. In the 1940s, Viner, Brodie, and others argued that the advent of Mutually Assured Destruction (MAD) rendered war among major powers obsolete, but nuclear deterrence theory soon advanced beyond that simple understanding.[[8]](#footnote-8)[36] After all, great power political competition does not end with nuclear weapons. And nuclear-armed states still seek to threaten nuclear-armed adversaries. States cannot credibly threaten to launch a suicidal nuclear war, but they still want to coerce their adversaries. This leads to a credibility problem: how can states credibly threaten a nuclear-armed opponent? Since the 1960s academic nuclear deterrence theory has been devoted almost exclusively to answering this question.[[9]](#footnote-9)[37] And, unfortunately for proliferation optimists, the answers do not give us reasons to be optimistic. Thomas Schelling was the first to devise a rational means by which states can threaten nuclear-armed opponents.[[10]](#footnote-10)[38] He argued that leaders cannot credibly threaten to intentionally launch a suicidal nuclear war, but they can make a “threat that leaves something to chance.”[[11]](#footnote-11)[39] They can engage in a process, the nuclear crisis, which increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. As states escalate a nuclear crisis there is an increasingprobability that the conflict will spiral out of control and result in an inadvertent or accidental nuclear exchange. As long as the benefit of winning the crisis is greater than the incremental increase in the risk of nuclear war, threats to escalate nuclear crises are inherently credible. In these games of nuclear brinkmanship, the state that is willing to run the greatest risk of nuclear war before back down will win the crisis as long as it does not end in catastrophe. It is for this reason that Thomas Schelling called great power politics in the nuclear era a “competition in risk taking.”[[12]](#footnote-12)[40] This does not mean that states eagerly bid up the risk of nuclear war. Rather, they face gut-wrenching decisions at each stage of the crisis. They can quit the crisis to avoid nuclear war, but only by ceding an important geopolitical issue to an opponent. Or they can the escalate the crisis in an attempt to prevail, but only at the risk of suffering a possible nuclear exchange. Since 1945 there were have been many high stakes nuclear crises (by my count, there have been twenty) in which “rational” states like the United States run a risk of nuclear war and inch very close to the brink of nuclear war.[[13]](#footnote-13)[41] By asking whether states can be deterred or not, therefore, proliferation optimists are asking the wrong question. The right question to ask is: what risk of nuclear war is a specific state willing to run against a particular opponent in a given crisis? Optimists are likely correct when they assert that Iran will not intentionally commit national suicide by launching a bolt-from-the-blue nuclear attack on the United States or Israel. This does not mean that Iran will never use nuclear weapons, however. Indeed, it is almost inconceivable to think that a nuclear-armed Iran would not, at some point, find itself in a crisis with another nuclear-armed power and that it would not be willing to run any risk of nuclear war in order to achieve its objectives. If a nuclear-armed Iran and the United States or Israel have a geopolitical conflict in the future, over say the internal politics of Syria, an Israeli conflict with Iran’s client Hezbollah, the U.S. presence in the Persian Gulf, passage through the Strait of Hormuz, or some other issue, do we believe that Iran would immediately capitulate? Or is it possible that Iran would push back, possibly even brandishing nuclear weapons in an attempt to deter its adversaries? If the latter, there is a real risk that proliferation to Iran could result in nuclear war. An optimist might counter that nuclear weapons will never be used, even in a crisis situation, because states have such a strong incentive, namely national survival, to ensure that nuclear weapons are not used. But, this objection ignores the fact that leaders operate under competing pressures. Leaders in nuclear-armed states also have very strong incentives to convince their adversaries that nuclear weapons could very well be used. Historically we have seen that in crises, leaders purposely do things like put nuclear weapons on high alert and delegate nuclear launch authority to low level commanders, purposely increasing the risk of accidental nuclear war in an attempt to force less-resolved opponents to back down. Moreover, not even the optimists’ first principles about the irrelevance of nuclear posture stand up to scrutiny. Not all nuclear wars would be equally devastating.[[14]](#footnote-14)[42] Any nuclear exchange would have devastating consequences no doubt, but, if a crisis were to spiral out of control and result in nuclear war, any sane leader would rather be facing a country with five nuclear weapons than one with thirty-five thousand. Similarly, any sane leader would be willing to run a greater risk of nuclear war against the former state than against the latter. Indeed, systematic research has demonstrated that states are willing to run greater risks and, therefore, more likely to win nuclear crises when they enjoy nuclear superiority over their opponent.[[15]](#footnote-15)[43] Proliferation optimists miss this point, however, because they are still mired in 1940s deterrence theory. It is true that no rational leader would choose to launch a nuclear war, but, depending on the context, she would almost certainly be willing to risk one. Nuclear deterrence theorists have proposed a second scenario under which rational leaders could instigate a nuclear exchange: a limited nuclear war.[[16]](#footnote-16)[44] By launching a single nuclear weapon against a small city, for example, it was thought that a nuclear-armed state could signal its willingness to escalate the crisis, while leaving its adversary with enough left to lose to deter the adversary from launching a full-scale nuclear response. In a future crisis between a nuclear-armed China and the United States over Taiwan, for example, China could choose to launch a nuclear attack on Honolulu to demonstrate its seriousness. In that situation, with the continental United States intact, would Washington choose to launch a full-scale nuclear war on China that could result in the destruction of many more American cities? Or would it back down? China might decide to strike hoping that Washington will choose a humiliating retreat over a full-scale nuclear war. If launching a limited nuclear war could be rational, it follows that the spread of nuclear weapons increases the risk of nuclear use. Again, by ignoring contemporary developments in scholarly discourse and relying exclusively on understandings of nuclear deterrence theory that became obsolete decades ago, optimists reveal the shortcomings of their analysis and fail to make a compelling case. The optimists also error by confusing stability for the national interest. Even if the spread of nuclear weapons contributes to greater levels of international stability (which discussions above and below suggest it might not) it does not necessarily follow that the spread of nuclear weapons is in the U.S. interest. There might be other national goals that trump stability, such as reducing to zero the risk of nuclear war in an important geopolitical region. Optimists might argue that South Asia is more stable when India and Pakistan have nuclear weapons, but certainly the risk of nuclear war is higher than if there were no nuclear weapons on the subcontinent. In addition, it is wrong to assume that stability is always in the national interest. Sometimes it is, but sometimes it is not. If stability is obtained because Washington is deterred from using force against a nuclear-armed adversary in a situation where using force could have advanced national goals, stability harms, rather than advances, U.S. national interests. The final gaping weakness in the proliferation optimist argument, however, is that it rests on a logical contradiction. This is particularly ironic, given that many optimists like to portray themselves as hard-headed thinkers, following their premises to their logical conclusions. But, the contradiction at the heart of the optimist argument is glaring and simple to understand: either the probability of nuclear war is zero, or it is nonzero, but it cannot be both. If the probability of nuclear war is zero, then nuclear weapons should have no deterrent effect. States will not be deterred by a nuclear war that could never occur and states should be willing to intentionally launch large-scale wars against nuclear-armed states. In this case, proliferation optimists cannot conclude that the spread of nuclear weapons is stabilizing. If, on the other hand, the probability of nuclear war is nonzero, then there is a real danger that the spread of nuclear weapons increases the probability of a catastrophic nuclear war. If this is true, then proliferation optimists cannot be certain that nuclear weapons will never be used. In sum, the spread of nuclear weapons can either raise the risk of nuclear war and in so doing, deter large-scale conventional conflict. Or there is no danger that nuclear weapons will be used and the spread of nuclear weapons does not increase international instability. But, despite the claims of the proliferation optimists, it is nonsensical to argue that nuclear weapons will never be used and to simultaneously claim that their spread contributes to international stability. Proliferation Anti-obsessionists: Other scholars, who I label “anti-obsessionists” argue that the spread of nuclear weapons has neither been good nor bad for international politics, but rather irrelevant. They argue that academics and policymakers concerned about nuclear proliferation spend too much time and energy obsessing over something, nuclear weapons, that, at the end of the day, are not all that important. In Atomic Obsession, John Mueller argues that widespread fears about the threat of nuclear weapons are overblown.[[17]](#footnote-17)[45] He acknowledges that policymakers and experts have often worried that the spread of nuclear weapons could lead to nuclear war, nuclear terrorism and cascades of nuclear proliferation, but he then sets about systematically dismantling each of these fears. Rather, he contends that nuclear weapons have had little effect on the conduct of international diplomacy and that world history would have been roughly the same had nuclear weapons never been invented. Finally, Mueller concludes by arguing that the real problem is not nuclear proliferation, but nuclear nonproliferation policy because states do harmful things in the name of nonproliferation, like take military action and deny countries access to nuclear technology for peaceful purposes. Similarly, Ward Wilson argues that, despite the belief held by optimists and pessimists alike, nuclear weapons are not useful tools of deterrence.[[18]](#footnote-18)[46] In his study of the end of World War II, for example, Wilson argues that it was not the U.S. use of nuclear weapons on Hiroshima and Nagasaki that forced Japanese surrender, but a variety of other factors, including the Soviet Union’s decision to enter the war. If the actual use of nuclear weapons was not enough to convince a country to capitulate to its opponent he argues, then there is little reason to think that the mere threat of nuclear use has been important to keeping the peace over the past half century. Leaders of nuclear-armed states justify nuclear possession by touting their deterrent benefits, but if nuclear weapons have no deterrent value, there is no reason, Ward claims, not to simply get rid of them. Finally, Anne Harrington de Santana argues that nuclear experts “fetishize” nuclear weapons.[[19]](#footnote-19)[47] Just like capitalists, according to Karl Marx, bestow magical qualities on money, thus fetishizing it, she argues that leaders and national security experts do the same thing to nuclear weapons. Nuclear deterrence as a critical component of national security strategy, according to Harrington de Santana, is not inherent in the technology of nuclear weapons themselves, but is rather the result of how leaders in countries around the world think about them. In short, she argues, “Nuclear weapons are powerful because we treat them as powerful.”[[20]](#footnote-20)[48] But, she maintains, we could just as easily “defetish” them, treating them as unimportant and, therefore, rendering them obsolete. She concludes that “Perhaps some day, the deactivated nuclear weapons on display in museums across the United States will be nothing more than a reminder of how powerful nuclear weapons used to be.”[[21]](#footnote-21)[49] The anti-obsessionists make some thought-provoking points and may help to reign in some of the most hyperbolic accounts of the effect of nuclear proliferation. They remind us, for example, that our worst fears have not been realized, at least not yet. Yet, by taking the next step and arguing that nuclear weapons have been, and will continue to be, irrelevant, they go too far. Their arguments call to mind the story about the man who jumps to his death from the top of a New York City skyscraper and, when asked how things are going as he passes the 15th story window, replies, “so far so good.” The idea that world history would have been largely unchanged had nuclear weapons not been invented is a provocative one, but it is also unfalsifiable. There is good reason to believe that world history would have been different, and in many ways better, had certain countries not acquired nuclear weapons. Let’s take Pakistan as an example. Pakistan officially joined the ranks of the nuclear powers in May 1998 when it followed India in conducting a series of nuclear tests. Since then, Pakistan has been a poster child for the possible negative consequences of nuclear proliferation. Pakistan’s nuclear weapons have led to further nuclear proliferation as Pakistan, with the help of rogue scientist A.Q. Khan, transferred uranium enrichment technology to Iran, Libya, and North Korea.[[22]](#footnote-22)[50] Indeed, part of the reason that North Korea and Iran are so far along with their uranium enrichment programs is because they got help from Pakistan. Pakistan has also become more aggressive since acquiring nuclear weapons, displaying an increased willingness to sponsor cross-border incursions into India with terrorists and irregular forces.[[23]](#footnote-23)[51] In a number of high-stakes nuclear crises between India and Pakistan, U.S. officials worried that the conflicts could escalate to a nuclear exchange and intervened diplomatically to prevent Armageddon on the subcontinent. The U.S. government also worries about the safety and security of Pakistan’s nuclear arsenal, fearing that Pakistan’s nukes could fall into the hands of terrorists in the event of a state collapse or a break down in nuclear security. And we still have not witnessed the full range of consequences arising from Pakistani nuclear proliferation. Islamabad has only possessed the bomb for a little over a decade, but they are likely to keep it for decades to come, meaning that we could still have a nuclear war involving Pakistan. In short, Pakistan’s nuclear capability has already had deleterious effects on U.S. national security and these threats are only likely to grow over time. In addition, the anti-obsessionists are incorrect to argue that the cure of U.S. nuclear nonproliferation policy is worse than the disease of proliferation. Many observers would agree with Mueller that the U.S. invasion of Iraq in 2003 was a disaster, costing much in the way of blood and treasure and offering little strategic benefit. But the Iraq War is hardly representative of U.S. nonproliferation policy. For the most part, nonproliferation policy operates in the mundane realm of legal frameworks, negotiations, inspections, sanctions, and a variety of other tools. Even occasional preventive military strikes on nuclear facilities have been far less calamitous than the Iraq War. Indeed, the Israeli strikes on nuclear reactors in Iraq and Syria in 1981 and 2007, respectively, produced no meaningful military retaliation and a muted international response. Moreover, the idea that the Iraq War was primarily about nuclear nonproliferation is a contestable one, with Saddam Hussein’s history of aggression, the unsustainability of maintaining the pre-war containment regime indefinitely, Saddam’s ties to terrorist groups, his past possession and use of chemical and biological weapons, and the window of opportunity created by September 11th, all serving as possible prompts for U.S. military action in the Spring of 2003. The claim that nonproliferation policy is dangerous because it denies developing countries access to nuclear energy also rests on shaky ground. If anything, the global nonproliferation regime has, on balance, increased access to nuclear technology. Does anyone really believe that countries like Algeria, Congo, and Vietnam would have nuclear reactors today were it not for Atoms for Peace, Article IV of the NPT, and other appendages of the nonproliferation regime that have provided developing states with nuclear technology in exchange for promises to forgo nuclear weapons development? Moreover, the sensitive fuel-cycle technology denied by the Nuclear Suppliers Group (NSG) and other supply control regimes is not even necessary to the development of a vibrant nuclear energy program as the many countries that have fuel-cycle services provided by foreign nuclear suppliers clearly demonstrate. Finally, the notion that nuclear energy is somehow the key to lifting developing countries from third to first world status does not pass the laugh test. Given the large upfront investments, the cost of back-end fuel management and storage, and the ever-present danger of environmental catastrophe exemplified most recently by the Fukushima disaster in Japan, many argue that nuclear energy is not a cost-effective source of energy (if all the externalities are taken into account) for any country, not to mention those developing states least able to manage these myriad challenges. Taken together, therefore, the argument that nuclear nonproliferation policy is more dangerous than the consequences of nuclear proliferation, including possible nuclear war, is untenable. Indeed, it would certainly come as a surprise to the mild mannered diplomats and scientists who staff the International Atomic Energy Agency, the global focal point of the nuclear nonproliferation regime, located in Vienna, Austria. The anti-obsessionsists, like the optimists, also walk themselves into logical contradictions. In this case, their policy recommendations do not necessarily follow from their analyses. Ward argues that nuclear weapons are irrelevant and, therefore, we should eliminate them.[[24]](#footnote-24)[52] But, if nuclear weapons are really so irrelevant, why not just keep them lying around? They will not cause any problems if they are as meaningless as anti-obsessionists claim and it is certainly more cost effective to do nothing than to negotiate complicated international treaties and dismantle thousands of warheads, delivery vehicles, and their associated facilities. Finally, the idea that nuclear weapons are only important because we think they are powerful is arresting, but false. There are properties inherent in nuclear weapons that can be used to create military effects that simply cannot, at least not yet, be replicated with conventional munitions. If a military planner wants to quickly destroy a city on the other side of the planet, his only option today is a nuclear weapon mounted on an ICBM. Therefore, if the collective “we” suddenly decided to “defetishize” nuclear weapons by treating them as unimportant, it is implausible that some leader somewhere would not independently come to the idea that nuclear weapons could advance his or her country’s national security and thereby re-fetishize them. In short, the optimists and anti-obsessionists have brought an important perspective to the nonproliferation debate. Their arguments are provocative and they raise the bar for those who wish to argue that the spread of nuclear weapons is indeed a problem. Nevertheless, their counterintuitive arguments are not enough to wish away the enormous security challenges posed by the spread of the world’s most dangerous weapons. These myriad threats will be considered in the next section. Why Nuclear Proliferation Is a Problem The spread of nuclear weapons poses a number of severe threats to international peace and U.S. national security including: nuclear war, nuclear terrorism, emboldened nuclear powers, constrained freedom of action, weakened alliances, and further nuclear proliferation. This section explores each of these threats in turn. Nuclear War. The greatest threat posed by the spread of nuclear weapons is nuclear war. The more states in possession of nuclear weapons, the greater the probability that somewhere, someday, there is a catastrophic nuclear war. A nuclear exchange between the two superpowers during the Cold War could have arguably resulted in human extinction and a nuclear exchange between states with smaller nuclear arsenals, such as India and Pakistan, could still result in millions of deaths and casualties, billions of dollars of economic devastation, environmental degradation, and a parade of other horrors. To date, nuclear weapons have only been used in warfare once. In 1945, the United States used one nuclear weapon each on Hiroshima and Nagasaki, bringing World War II to a close. Many analysts point to sixty-five-plus-year tradition of nuclear non-use as evidence that nuclear weapons are unusable, but it would be naïve to think that nuclear weapons will never be used again. After all, analysts in the 1990s argued that worldwide economic downturns like the great depression were a thing of the past, only to be surprised by the dot-com bubble bursting in the later 1990s and the Great Recession of the late Naughts.[[25]](#footnote-25)[53] This author, for one, would be surprised if nuclear weapons are not used in my lifetime. Before reaching a state of MAD, new nuclear states go through a transition period in which they lack a secure-second strike capability. In this context, one or both states might believe that it has an incentive to use nuclear weapons first. For example, if Iran acquires nuclear weapons neither Iran, nor its nuclear-armed rival, Israel, will have a secure, second-strike capability. Even though it is believed to have a large arsenal, given its small size and lack of strategic depth, Israel might not be confident that it could absorb a nuclear strike and respond with a devastating counterstrike. Similarly, Iran might eventually be able to build a large and survivable nuclear arsenal, but, when it first crosses the nuclear threshold, Tehran will have a small and vulnerable nuclear force. In these pre-MAD situations, there are at least three ways that nuclear war could occur. First, the state with the nuclear advantage might believe it has a splendid first strike capability. In a crisis, Israel might, therefore, decide to launch a preemptive nuclear strike to disarm Iran’s nuclear capabilities and eliminate the threat of nuclear war against Israel. Indeed, this incentive might be further increased by Israel’s aggressive strategic culture that emphasizes preemptive action. Second, the state with a small and vulnerable nuclear arsenal, in this case Iran, might feel use ‘em or loose ‘em pressures. That is, if Tehran believes that Israel might launch a preemptive strike, Iran might decide to strike first rather than risk having its entire nuclear arsenal destroyed. Third, as Thomas Schelling has argued, nuclear war could result due to the reciprocal fear of surprise attack.[[26]](#footnote-26)[54] If there are advantages to striking first, one state might start a nuclear war in the belief that war is inevitable and that it would be better to go first than to go second. In a future Israeli-Iranian crisis, for example, Israel and Iran might both prefer to avoid a nuclear war, but decide to strike first rather than suffer a devastating first attack from an opponent. Even in a world of MAD, there is a risk of nuclear war. Rational deterrence theory assumes nuclear-armed states are governed by rational leaders that would not intentionally launch a suicidal nuclear war. This assumption appears to have applied to past and current nuclear powers, but there is no guarantee that it will continue to hold in the future. For example, Iran’s theocratic government, despite its inflammatory rhetoric, has followed a fairly pragmatic foreign policy since 1979, but it contains leaders who genuinely hold millenarian religious worldviews who could one day ascend to power and have their finger on the nuclear trigger. We cannot rule out the possibility that, as nuclear weapons continue to spread, one leader will choose to launch a nuclear war, knowing full well that it could result in self-destruction. One does not need to resort to irrationality, however, to imagine a nuclear war under MAD. Nuclear weapons may deter leaders from intentionally launching full-scale wars, but they do not mean the end of international politics. As was discussed above, nuclear-armed states still have conflicts of interest and leaders still seek to coerce nuclear-armed adversaries. This leads to the credibility problem that is at the heart of modern deterrence theory: how can you threaten to launch a suicidal nuclear war? Deterrence theorists have devised at least two answers to this question. First, as stated above, leaders can choose to launch a limited nuclear war.[[27]](#footnote-27)[55] This strategy might be especially attractive to states in a position of conventional military inferiority that might have an incentive to escalate a crisis quickly. During the Cold War, the United States was willing to use nuclear weapons first to stop a Soviet invasion of Western Europe given NATO’s conventional inferiority in continental Europe. As Russia’s conventional military power has deteriorated since the end of the Cold War, Moscow has come to rely more heavily on nuclear use in its strategic doctrine. Indeed, Russian strategy calls for the use of nuclear weapons early in a conflict (something that most Western strategists would consider to be escalatory) as a way to de-escalate a crisis. Similarly, Pakistan’s military plans for nuclear use in the event of an invasion from conventionally stronger India. And finally, Chinese generals openly talk about the possibility of nuclear use against a U.S. superpower in a possible East Asia contingency. Second, as was also discussed above leaders can make a “threat that leaves something to chance.”[[28]](#footnote-28)[56] They can initiate a nuclear crisis. By playing these risky games of nuclear brinkmanship, states can increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. Historical crises have not resulted in nuclear war, but many of them, including the 1962 Cuban Missile Crisis, have come close. And scholars have documented historical incidents when accidents could have led to war.[[29]](#footnote-29)[57] When we think about future nuclear crisis dyads, such as India and Pakistan and Iran and Israel, there are fewer sources of stability that existed during the Cold War, meaning that there is a very real risk that a future Middle East crisis could result in a devastating nuclear exchange.

### 2ac case

#### Plan key to beat out natural gas

Lamonica 12 [Tech Review Writer 20 years of experience covering technology and business. Martin, A Glut of Natural Gas Leaves Nuclear Power Stalled, [www.technologyreview.com/news/428737/a-glut-of-natural-gas-leaves-nuclear-power/](http://www.technologyreview.com/news/428737/a-glut-of-natural-gas-leaves-nuclear-power/)]

The nuclear renaissance is in danger of petering out before it has even begun, but not for the reasons most people once thought. Forget safety concerns, or the problem of where to store nuclear waste—the issue is simply cheap, abundant natural gas. General Electric CEO Jeffrey Immelt caused a stir last month when he told the Financial Times that it's "hard to justify nuclear" in light of low natural gas prices. Since GE sells all manner of power generation equipment, including components for nuclear plants, Immelt's comments hold a lot of weight. Cheap natural gas has become the fuel of choice with electric utilities, making building expensive new nuclear plants an increasingly tough sell. The United States is awash in natural gas largely thanks to horizontal drilling and hydraulic fracturing, or "fracking" technology, which allows drillers to extract gas from shale deposits once considered too difficult to reach. In 2008, gas prices were approaching $13 per million BTUs; prices have now dropped to around $3. When gas prices were climbing, there were about 30 nuclear plant projects in various stages of planning in the United States. Now the Nuclear Energy Institute estimates that, at most, five plants will be built by 2020, and those will only be built thanks to favorable financing terms and the ability to pay for construction from consumers' current utility bills. Two reactors now under construction in Georgia, for example, moved ahead with the aid of an $8.33 billion loan guarantee from the U.S. Department of Energy. What happens after those planned projects is hard to predict. "The question is whether we'll see any new nuclear," says Revis James, the director of generation research and development at the Electric Power Research Institute. "The prospects are not good." Outside the United States, it's a different story. Unconventional sources of natural gas also threaten the expansion of nuclear, although the potential impact is less clear-cut. Around the world, there are 70 plants now under construction, but shale gas also looms as a key factor in planning for the future. Prices for natural gas are already higher in Asia and Europe, and shale gas resources are not as fully developed as they are the United States. Some countries are also blocking the development of new natural gas resources. France, for instance, which has a strong commitment to nuclear, has banned fracking in shale gas exploration because of concerns over the environmental impact. Fast-growing China, meanwhile, needs all the energy sources available and is building nuclear power plants as fast as possible. Even in United States, of course, super cheap natural gas will not last forever. With supply exceeding demand, some drillers are said to be losing money on natural gas, which could push prices back up. Prices will also be pushed upward by utilities, as they come to rely on more natural gas for power generation, says James. Ali Azad, the chief business development officer at energy company Babcock & Wilcox, thinks the answer is making nuclear power smaller, cheaper, and faster. His is one of a handful of companies developing small modular reactors that can be built in three years, rather than 10 or more, for a fraction of the cost of gigawatt-size reactors. Although this technology is not yet commercially proven, the company has a customer in the Tennessee Valley Authority, which expects to have its first unit online in 2021 (see "A Preassembled Nuclear Reactor"). "When we arrive, we will have a level cost of energy on the grid, which competes favorably with a brand-new combined-cycle natural gas plants when gas prices are between $6 to $8," said Azad. He sees strong demand in power-hungry China and places such as Saudia Arabia, where power is needed for desalination. Even if natural gas remains cheaper, utilities don't want to find themselves with an overreliance on gas, which has been volatile on price in the past, so nuclear power will still contribute to the energy mix. "[Utilities] still continue [with nuclear] but with a lower level of enthusiasm—it's a hedging strategy," says Hans-Holger Rogner from the Planning and Economics Studies section of the International Atomic Energy Agency. "They don't want to pull all their eggs in one basket because of the new kid on the block called shale gas."

#### A firm commitment to loan guarantees resolves investor uncertainty over federal restrictions

**Turnage et al, 7** – Senior Vice President, Constellation Energy Group Inc

(Joe C, and Theodore Bunting, Jr, Senior Vice President of Finance, Entergy Corp, and John F Young, Executive Vice President and CFO, Exelon Corp, and Steve Winn, Executive Vice President, NRG Energy, Inc, “Join Comments of Constellation Group, Inc, Entergy Corporation, Exelon Corporation, and NRG Energy, Inc. regarding Proposed Rule, Loan Guarantees for Projects that Employ Innovative Technologies,” addressed to Mr. Howard G Bordstrom, July 2, 2007, <http://www.lgprogram.energy.gov/nopr-comments/comment41.pdf>)

**For new nuclear power plant development in the United States, Federal loan guarantees are an indispensable instrument to address a market financing gap that results from** the combination of several factors including, (i) **the prior nuclear plant construction cycle that was burdened by regulatory uncertainty** and resulting delays and cost overruns; (ii) **perceived uncertainty of an untested** (though certainly improved) **licensing system;** (iii) **perceived technology risk, and** (iv) an **institutional loss of understanding regarding the reality of nuclear financial risk** in some elements of the financial community.

#### The plan reinvigorates growth

Westenhaus, ‘10

[Brian, OilPrice.com -- Energy News, 9-14, “Thorium: A Cheap, Clean and Safe Alternative to Uranium,” http://oilprice.com/Energy/Energy-General/Thorium-A-Cheap-Clean-And-Safe-Alternative-To-Uranium.html]

With some concept tests thorium used as a nuclear fuel could end energy as a problem issue and shift the economy into a new growth phase. All the conversation in the media, politics and the economy could be moved to building the next centuries energy production with thorium and the various ways to use the metal as a fission power source. Nobel laureate Carlo Rubbia at the European Organization for Nuclear Research points out the use of thorium as a cheap, clean and safe alternative to uranium in reactors may be the magic bullet we have all been hoping for. It’s an idea well worth much more attention. The math on thorium is impressive. Dr Rubbia says a metric ton of the silvery metal produces as much energy as 200 tons of uranium, or 3,500,000 ton of coal. A handful would power a major city for a week.

#### And, that trades off with US market access – collapses economic competitiveness

Wash Post 12 [Washington Post, 3-14, “America Is Letting China Steal Our Valuable Nuclear Innovations,” http://www.washingtonsblog.com/2012/03/america-is-letting-china-steal-our-valuable-nuclear-innovations.html]

The U.S. Is Letting China Steal Its Nuclear Innovations … Just Like Xerox Let Apple and Microsoft Steal Its Valuable Breakthroughs Microsoft and Apple grew rich by using Xerox’s innovation. Xerox’s research arm (called Xerox Parc) invented the “graphical user interface” used by all modern computers. Bill Gates famously admitted to Steve Jobs that both Microsoft and Apple had ripped of Xerox’s GUI. Xerox could have made a fortune on its innovation. But it didn’t realize what it had … and failed to capitalize on its breakthroughs (Xerox tried to sue to protect its invention … but years too late, and the lawsuit was thrown out because Xerox had missed the deadline for suing). The same dynamic is playing out in the nuclear industry. Specifically, the U.S. created a safer, more efficient form of nuclear energy running on thorium. But – like Xerox Parc – America isn’t doing anything with its innovation, and China is running off with prize. The Telegraph’s Ambrose Evans-Pritchard notes: If China’s dash for thorium power succeeds, it will vastly alter the global energy landscape …. China’s Academy of Sciences said it had chosen a “thorium-based molten salt reactor system”. The liquid fuel idea was pioneered by US physicists at Oak Ridge National Lab in the 1960s, but the US has long since dropped the ball. Further evidence of Barack `Obama’s “Sputnik moment”, you could say. Chinese scientists claim that hazardous waste will be a thousand times less than with uranium. The system is inherently less prone to disaster. “The reactor has an amazing safety feature,” said Kirk Sorensen, a former NASA engineer at Teledyne Brown and a thorium expert. “If it begins to overheat, a little plug melts and the salts drain into a pan. There is no need for computers, or the sort of electrical pumps that were crippled by the tsunami. The reactor saves itself,” he said. “They operate at atmospheric pressure so you don’t have the sort of hydrogen explosions we’ve seen in Japan. One of these reactors would have come through the tsunami just fine. There would have been no radiation release.” The Telegraph continues: Professor Robert Cywinksi from Huddersfield University said thorium must be bombarded with neutrons to drive the fission process. “There is no chain reaction. Fission dies the moment you switch off the photon beam. There are not enough neutrons for it continue of its own accord,” he said. Dr Cywinski, who anchors a UK-wide thorium team, said the residual heat left behind in a crisis would be “orders of magnitude less” than in a uranium reactor. The earth’s crust holds 80 years of uranium at expected usage rates, he said. Thorium is as common as lead. America has buried tons as a by-product of rare earth metals mining. Norway has so much that Oslo is planning a post-oil era where thorium might drive the country’s next great phase of wealth. Even Britain has seams in Wales and in the granite cliffs of Cornwall. Almost all the mineral is usable as fuel, compared to 0.7pc of uranium. There is enough to power civilization for thousands of years. \*\*\* US physicists in the late 1940s explored thorium fuel for power. It has a higher neutron yield than uranium, a better fission rating, longer fuel cycles, and does not require the extra cost of isotope separation. The plans were shelved because thorium does not produce plutonium for bombs. As a happy bonus, it can burn up plutonium and toxic waste from old reactors, reducing radio-toxicity and acting as an eco-cleaner. Dr Cywinski is developing an accelerator driven sub-critical reactor for thorium, a cutting-edge project worldwide …. The idea is to make pint-size 600MW reactors. Popular Science reports: It would be based on thorium, a radioactive element that is much more abundant, and much more safe, than traditional sources of nuclear power. Some advocates believe small nuclear reactors powered by thorium could wean the world off coal and natural gas, and do it more safely than traditional nuclear. Thorium is not only abundant, but more efficient than uranium or coal — one ton of the silver metal can produce as much energy as 200 tons of uranium, or 3.5 million tons of coal, as the Mail on Sunday calculates it. \*\*\* Thorium reactors would not melt down, in part because they require an external input to produce fission. Thorium atoms would release energy when bombarded by high-energy neutrons, such as the type supplied in a particle accelerator. Wired points out: “President Obama talked about a Sputnik-type call to action in his [State of the Union] address,” wrote Charles Hart, a a retired semiconductor researcher and frequent commenter on the Energy From Thorium discussion forum. “I think this qualifies.” While nearly all current nuclear reactors run on uranium, the radioactive element thorium is recognized as a safer, cleaner and more abundant alternative fuel. Thorium is particularly well-suited for use in molten-salt reactors, or MSRs. Nuclear reactions take place inside a fluid core rather than solid fuel rods, and there’s no risk of meltdown. In addition to their safety, MSRs can consume various nuclear-fuel types, including existing stocks of nuclear waste. Their byproducts are unsuitable for making weapons of any type. They can also operate as breeders, producing more fuel than they consume. In the 1960s and 70s, the United States carried out extensive research on thorium and MSRs at Oak Ridge National Laboratory. That work was abandoned — partly, believe many, because uranium reactors generated bomb-grade plutonium as a byproduct. Today, with nuclear weapons less in demand and cheap oil’s twilight approaching, several countries — including India, France and Norway — are pursuing thorium-based nuclear-fuel cycles. (The grassroots movement to promote an American thorium power supply was covered in this December 2009 Wired magazine feature.) China’s new program is the largest national thorium-MSR initiative to date. The People’s Republic had already announced plans to build dozens of new nuclear reactors over the next 20 years, increasing its nuclear power supply 20-fold and weaning itself off coal, of which it’s now one of the world’s largest consumers. Designing a thorium-based molten-salt reactor could place China at the forefront of the race to build environmentally safe, cost-effective and politically palatable reactors. \*\*\* A Chinese thorium-based nuclear power supply is seen by many nuclear advocates and analysts as a threat to U.S. economic competitiveness. During a presentation at Oak Ridge on Jan. 31, Jim Kennedy, CEO of St. Louis–based Wings Enterprises (which is trying to win approval to start a mine for rare earths and thorium at Pea Ridge, Missouri) portrayed the Chinese thorium development as potentially crippling. “If we miss the boat on this, how can we possibly compete in the world economy?” Kennedy asked. “What else do we have left to export?” According to thorium advocates, the United States could find itself 20 years from now importing technology originally developed nearly four decades ago at one of America’s premier national R&D facilities. The alarmist version of China’s next-gen nuclear strategy come down to this: If you like foreign-oil dependency, you’re going to love foreign-nuclear dependency. \*\*\* While the international “Generation IV” nuclear R&D initiative includes a working group on thorium MSRs, **China has made clear its intention to go it alone. The Chinese Academy of Sciences announcement explicitly states that the PRC plans to develop and control intellectual property around thorium for its own benefit**. “This will enable China to firmly grasp the lifeline of energy in its own hands,” stated the Wen Hui Bao report. The U.S. is acting just like Xerox Parc, letting others steal its innovations … and losing entire markets in the process. If America fails to capitalize on its breakthrough, and let’s China obtain all of the relevant thorium energy patents, we could lose the entire market. Too bad the U.S. government – instead of developing the thorium concept which it innovated decades ago – is protecting an obsolete uranium model which was chosen only because produced plutonium for nuclear warheads and powered nuclear submarines. Indeed, our government is doubling-down on archaic and unsafe technology: the Nuclear Regulatory Commission has approved construction of new nuclear plants which do not incorporate the safety measures needed to prevent a Fukushima meltdown here … and the same companies which built and operated Fukushima will build and run the U.S. plants as well.

#### Extinction impact is empirically denied by Fukushima, and Chernobyl

Bosselman, ‘7 [Fred, Professor of Law Emeritus, Chicago-Kent College of Law, “THE NEW POWER GENERATION: ENVIRONMENTAL LAW AND ELECTRICITY INNOVATION: COLLOQUIUM ARTICLE: THE ECOLOGICAL ADVANTAGES OF NUCLEAR POWER,” 15 N.Y.U. Envtl. L.J. 1, Lexis]

C. "But What About Chernobyl?" In 1986, an explosion at the Chernobyl nuclear power plant in the Ukraine caused the release of large amounts of radiation into the atmosphere. [247](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n247) Initially, the Soviet government released little information about the explosion and tried to play down its seriousness, but this secrecy caused great nervousness throughout Europe, and fed the public's fears of nuclear power all over the [\*46] world. [248](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n248) Now a comprehensive analysis of the event and its aftermath has been made: In 2005, a consortium of United Nations agencies called the Chernobyl Forum released its analysis of the long-term effects of the Chernobyl explosion. [249](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n249) The U.N. agencies' study found that the explosion caused fewer deaths than had been expected. [250](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n250) Although the Chernobyl reactor was poorly designed and badly operated [251](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n251) and lacked the basic safety protections found outside the Soviet Union, [252](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n252) fewer than seventy deaths so far have been attributed to the explosion, mostly plant employees and firefighters who suffered acute radiation sickness. [253](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n253) The Chernobyl reactor, like many Soviet reactors, was in the open rather than in an American type of pressurizable containment structure, which would have prevented the release of radiation to the environment if a similar accident had occurred. [254](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n254) [\*47] Perhaps the most surprising finding of the U.N. agencies' study was that "the ecosystems around the Chernobyl site are now flourishing.The [Chernobyl exclusion zone] has become a wildlife sanctuary, and it looks like the nature park it has become." [255](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n255) Jeffrey McNeely, the chief scientist of the World Conservation Union, has made similar observations: Chernobyl has now become the world's first radioactive nature reserve... . 200 wolves are now living in the nature reserve, which has also begun to support populations of reindeer, lynx and European bison, species that previously were not found in the region. While the impact on humans was strongly negative, the wildlife is adapting and even thriving on the site of one of the 20th century's worst environmental disasters. [256](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n256) Mary Mycio, the Kiev correspondent for the Los Angeles Times, has written a fascinating book based on her many visits to the exclusion zone and interviews with people in the area. [257](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n257) She notes that the fear that radiation would produce permanent deformities in animal species has not been borne out after twenty years; the population and diversity of animals in even some of the most heavily radiated parts of the exclusion zone is similar to comparable places that are less radioactive. [258](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n258)

#### And, 1ac Banks and Ebbinger say demand increases are inevitable – rising prices, volatility and current expansion prove nuclear power is inevitable

**And, the most qualified ev proves our argument**

**Amano, 12** [Yukiyo, Director General of the International Atomic Energy Agency, International Status and Prospects for Nuclear Power 2012, <http://www.iaea.org/About/Policy/GC/GC56/GC56InfDocuments/English/gc56inf-6_en.pdf>]

C.2. Prospects in Countries considering the Introduction of Nuclear Power 41. Since the mid-2000s, developing countries have expressed a new or renewed interest in nuclear power. While the Fukushima Daiichi accident caused some countries to change their positions and some to take a ‘wait and see’ approach, interest continued among countries considering or planning for nuclear power introduction. 42. Table C-2 shows the number of countries at different stages of nuclear power consideration or development. Sometimes referred to as ‘nuclear newcomers’, some countries, such as Bangladesh, Egypt and Vietnam, have in fact been planning for nuclear power for some time. Others, such as Poland, are reviving the nuclear power option after plans had been curtailed when governments and public opinion changed. Countries such as Jordan and Uruguay are considering or planning for nuclear power for the first time. What they have in common is that they are all considering, planning or starting nuclear power programmes, and have not connected a first nuclear power plant to the grid. TABLE C-1. Positions of countries with operating nuclear power plants plus Lithuania Category Number of countries New unit(s) under construction with more planned/proposed 11 New unit(s) under construction but the policy for more units is not established 2 No units under construction but with plans/proposals for building new unit(s) 10 No units under construction, and currently no plans/policy for building new units 4 Firm policy not to build new units and/or for closure of existing units 4 TABLE C-2. Positions of countries without operating nuclear power plants8 Description of group Number of Countries 2012 Number of Countries 2010 Number of Countries 2008 Considering a nuclear programme to meet identified energy needs with a strong indication of intention to proceed 14 14 14 Active preparation for a possible nuclear power programme with no final decision 6 7 7 Decided to introduce nuclear power and started preparing the appropriate infrastructure 6 10 5 New nuclear power plant ordered 3 2 0 New nuclear power plant under construction 0 1 1 43. Of the 29 countries considering or planning for nuclear power in 2012, 10 are from the Asia and the Pacific region, 10 are from the Africa region, 7 are in Europe (mostly Eastern Europe) and 2 are in Latin America8 Two additional groups were included in previous editions of this publication but not in this edition because they did not add substantially to an understanding of the rising expectations for nuclear power among developing countries. One group included countries that were not planning to introduce nuclear power but were interested in considering the associated issues, but it proved difficult to characterize trends and there were wide fluctuations in the numbers from year to year. A second group included countries where an invitation to bid to supply a nuclear power plant had been prepared, but this proved problematic because of countries that were choosing to order plants through direct bilateral agreements rather than through bids. GOV/INF/2012/12-GC(56)/INF/6 Page 10 44. Even after the Fukushima Daichii accident, some countries have taken concrete steps toward nuclear power introduction. In the United Arab Emirates (UAE), in 2011, the Emirates Nuclear Energy Corporation invited bids for uranium, conversion and enrichment for the fuel for the UAE’s first reactors. In Turkey, the project company Akkuyu Nukleer Santral Elektrik Uretim filed applications for construction permits and a power generation licence. Belarus signed a contract with the Russian Federation for the construction of two reactors, and Bangladesh signed an intergovernmental agreement with the Russian Federation, also for two reactors. Vietnam signed a loan agreement with the Russian Federation regarding financing of its first nuclear power plant and announced its intention to undertake a similar agreement with Japan. 45. The Islamic Republic of Iran began commissioning of its first nuclear power plant at Bushehr in September 2011, which marked the commissioning of the first nuclear power plant in a ‘newcomer’ country in 15 years. 46. The rate at which new countries joined the list of countries operating nuclear power plants was fairly steady through the early 1980s as shown in Fig. C-1. Until the addition of the Islamic Republic of Iran in 2011, only three countries had connected their first nuclear power plants to the grid in the post-Chernobyl era — China, Mexico and Romania. The countries now planning for their first nuclear power plants are doing so after an experience gap of 15 years. Of the countries considering or planning for their first nuclear plant, 9 have explicitly expressed target dates for the first operation before 2030. FIG. C-1. Number of countries operating, or having operated, nuclear power plants. Source IAEA (PRIS) 47. Overall, Tables C-1 and C-2 are consistent with trends reflected in the Agency’s low and high projections described below, i.e. there remains substantial uncertainty in projections about nuclear power, and the growth in the use of nuclear power is projected to be driven more by expansion in established nuclear power countries than by countries starting nuclear power programmes. The 9 countries that have explicitly expressed target dates for the first operation before 2030 lie between the 7 countries in the Agency’s low projection that would connect their first plant by 2030 and the 16 countries that would do so in the high projection. GOV/INF/2012/12-GC(56)/INF/6 Page 11 C.3. Potential Drivers for the Introduction of Nuclear Power 48. The key factors that have driven rising interest in nuclear power since about 2005, and the increase in construction starts shown in Fig. B-1, have not changed with the Fukushima Daiichi accident: growing energy demand, especially for electricity; volatile fossil fuel prices; environmental pressures and energy security concerns.

And, reject their Loony Tunes qualifications

Hörber, ‘8

\*\*Indicting a book by Caldecott that Lendman has explicitly quoted

[Thomas, École Supérieure des Sciences Commerciales d’Angers, France, “Book reviews: ‘Nuclear power is not the answer’,” International Affairs, May, Vol. 84, Iss. 3; pg. 555]

Overall, this book presents a strong argument against reliance on nuclear energy. Its fundamental shortcoming is its lack of objectivity, which may well stem from a genuine conviction that the nuclear option is simply not the right one, but which also compromises the case its author makes for the feasibility of renewable alternatives. This is particularly unfortunate, because playing the devil’s advocate for nuclear power might have added that modicum of plausibility to the argument for renewables which could help them to their breakthrough, and thus might have turned this very readable book into a truly objective and thus conclusive study.

#### And, their ev doesn’t assume the LFTR which is impervious to accidents

Hargraves & Moir, ‘10

[Robert, teaches energy policy at the Institute for Lifelong Education at Dartmouth College, CIO at Boston Scientific, doing medical devices, graduate degree in physics -- Brown University, received a graduate degree in physics, Brown University, has published 10 papers on molten-salt reactors during his career at Lawrence Livermore National Laboratory, Sc.D. in nuclear engineering from MIT, July-August, “Liquid Fluoride Thorium Reactors: An old idea in nuclear power gets reexamined,” The American Scientist]

It has always been the dream of reactor designers to produce plants with inherent safety—reactor assembly, fuel and power-generation components engineered in such a way that the reactor will, without human intervention, remain stable or shut itself down in response to any accident, electrical outage, abnormal change in load or other mishap. The LFTR design appears, in its present state of research and design, to possess an extremely high degree of inherent safety. The single most volatile aspect of current nuclear reactors is the pressurized water. In boiling light-water, pressurized light-water, and heavywater reactors (accounting for nearly all of the 441 reactors worldwide), water serves as the coolant and neutron moderator. The heat of fission causes water to boil, either directly in the core or in a steam generator, producing steam that drives a turbine. The water is maintained at high pressure to raise its boiling temperature. The explosive pressures involved are contained by a system of highly engineered, highly expensive piping and pressure vessels (called the “pressure boundary”), and the ultimate line of defense is the massive, expensive containment building surrounding the reactor, designed to withstand any explosive calamity and prevent the release of radioactive materials propelled by pressurized steam. A signature safety feature of the LFTR design is that the coolant—liquid fluoride salt—is not under pressure. The fluoride salt does not boil below 1400 degrees Celsius. Neutral pressure reduces the cost and the scale of LFTR plant construction by reducing the scale of the containment requirements, because it obviates the need to contain a pressure explosion. Disruption in a transport line would result in a leak, not an explosion, which would be captured in a noncritical configuration in a catch basin, where it would passively cool and harden. Another safety feature of LFTRs, shared with all of the new generation of LWRs, is its negative temperature coefficient of reactivity. Meltdown, the bogey of the early nuclear era, has been effectively designed out of modern nuclear fuels by engineering them so that power excursions—the industry term for runaway reactors—are self-limiting. For example, if the temperature in a reactor rises beyond the intended regime, signaling a power excursion, the fuel itself responds with thermal expansion, reducing the effective area for neutron absorption—the temperature coefficient of reactivity is negative—thus suppressing the rate of fission and causing the temperature to fall. With appropriate formulations and configurations of nuclear fuel, of which there are now a number from which to choose among solid fuels, runaway reactivity becomes implausible. In the LFTR, thermal expansion of the liquid fuel and the moderator vessel containing it reduces the reactivity of the core. This response permits the desirable property of load following—under conditions of changing electricity demand (load), the reactor requires no intervention to respond with automatic increases or decreases in power production. As a second tier of defense, LFTR designs have a freeze plug at the bottom of the core—a plug of salt, cooled by a fan to keep it at a temperature below the freezing point of the salt. If temperature rises beyond a critical point, the plug melts, and the liquid fuel in the core is immediately evacuated, pouring into a subcritical geometry in a catch basin. This formidable safety tactic is only possible if the fuel is a liquid. One of the current requirements of the Nuclear Regulatory Commission (NRC) for certification of a new nuclear plant design is that in the event of a complete electricity outage, the reactor remain at least stable for several days if it is not automatically deactivated. As it happens, the freeze plug safety feature is as old as Alvin Weinberg’s 1965 Molten Salt Reactor Experiment design, yet it meets the NRC’s requirement; at ORNL, the “old nukes” would routinely shut down the reactor by simply cutting the power to the freeze-plug cooling system. This setup is the ultimate in safe power outage response. Power isn’t needed to shut down the reactor, for example by manipulating control elements. Instead power is needed to prevent the shutdown of the reactor.

### 2ac coercion

#### Restrictions on liberty are inevitable – privileging freedom requires an examination of consequences

**Glaeser, 07** [Edward Glaeser, “COERCIVE REGULATION AND THE BALANCE OF FREEDOM”, <http://www.cato-unbound.org/2007/05/11/edward-glaeser/coercive-regulation-and-the-balance-of-freedom/>]

Minimum wage laws, like most restraints on trade and like tax laws, are enforced with the power of the state. Coercion lies at the core of almost all government policies. Rarely is voluntary participation a reliable tool for enforcing rules. If we could count on voluntary participation, we probably wouldn’t need the government involved in the first place.

But, as Klein notes, **just because something is coercive**, **doesn’t mean that it is wrong**. The coercive power of the state is useful when it protects our lives and property from outside harm. If we think that state-sponsored redistribution is desirable, then we are willing to accept more coercion to help the less fortunate. We also rely on state-sponsored coercion regularly when writing private contracts. The ability of creditors to collect depends on the power of the state to coerce borrowers.

The great difficulty is that coercion is both necessary and terrifying. For millenia, governments have abused their control over the tools of violence. The historical track record insists that we treat any governmental intervention warily. What principles help us decide on the appropriate limits to government-sponsored coercion? Are minimum wage laws acceptable coercion or do they fall outside of the pale?

I start with the view that individual freedom is the ultimate goal for any government. The ultimate job of the state is to increase the range of options available to its citizens. To me, this is not a maxim, but an axiom that is justified by both philosophy and history. On a basic level, I believe that human beings are the best judges of what is best for themselves. I also believe that the right to make our own decisions is an intrinsically good thing. I also believe that people become better decision-makers through the course of regularly making their own decisions. Moreover, the historical track record looks a lot better for governments that put freedom first. The liberal **democracies**, defined by their affection for liberty, **have been** far **better** for their citizens, **than alternatives**, whether Communist or Fascist, that enforced state-sponsored visions of how people should live their lives.

A belief in the value of liberty flows strongly through mainstream neoclassical economics. Economists frequently speak about an aim of maximizing utility levels, and this is often mistranslated as maximizing happiness. Maximizing freedom would be a better translation. The only way that economists know that utility has increased is if a person has more options to choose from, and that sounds like freedom to me. It is this attachment to liberty that makes neoclassical economists fond of political liberty and making people richer, because more wealth means more choices.

There is a recent wave of scholarship suggesting that the government can help individuals be happy by reducing their choices. While happiness may be a very nice thing, it is neither the obvious central desiderata for private or public decision-making. On a private level, I make decisions all that time that I expect to lower my level of happiness, because I have other objectives. On a public level, I can’t imagine why we would want to privilege this emotion over all other goals. A much better objective for the state is to aim at giving people the biggest range of choices possible, and then let people decide what is best for them.

But putting freedom first doesn’t mean abandoning the state. At the very least, we rely on the government to protect our private property against incursions by others. Even most libertarians think that it is reasonable for the state to enforce contracts. This enforcement increases the range of contractual options and this is, in a way, expands liberty.

#### Positive rights are necessary to achieve freedom and well-being – best universal moral standard

Herbert Hilbig, “The Just Social Contract”, last modified 1/22/2009, http://www.vitalinfo.org/3.24\_soc\_contract.htm

An individual's life chances are limited by the productivity and natural resources of the environment, but they are also determined by social relations, which may be just or unjust, at the community, state, and global level. The best a person can reasonably hope for is that the benefits and burdens in a community are justly distributed as regulated by an agreement that can be formal or informal, legal or traditional. At the nation state level, the social contract consists of that country's constitution, a large variety of laws based on that document, and a number of traditionally accepted rules of conduct.

     At the global or international level, relations are codified by The Charter of the UN and other international laws. As already noted elsewhere, the UN Global Human Rights Norms offer a most comprehensive set of behavioral standards and human rights. Indeed, **these norms offer the best universal moral standard to date**. They cover human relations in nations and between nations and supersede the now out-of-date, often narrow and self-serving standards of nations and organized religions.

However, these universal norms are only partially implemented because they are fought tooth and claw by reactionary conservative and religious ideologies that want to preserve their unearned advantages and status in society. The family of nations (192 as of 2008) has in principle agreed to this moral code or social contract that includes positive and negative rights but without labeling them. **Positive rights are necessary to achieve freedom and well-being as the birthright for all**, that is, **all must have the opportunity for a quality life.** Broadly speaking:

### 2ac solar da

**Too late to solve**

**NPR 9** (1/26, Global Warming Is Irreversible, Study Says, All Things Considered, http://www.npr.org/templates/story/story.php?storyId=99888903)

Climate change is essentially irreversible, according to a sobering new scientific study.

As carbon dioxide emissions continue to rise, the world will experience more and more long-term environmental disruption. The damage will persist even when, and if, emissions are brought under control, says study author Susan Solomon, who is among the world's top climate scientists.

"We're used to thinking about pollution problems as things that we can fix," Solomon says. "Smog, we just cut back and everything will be better later. Or haze, you know, it'll go away pretty quickly."

That's the case for some of the gases that contribute to climate change, such as methane and nitrous oxide. But as Solomon and colleagues suggest in a new study published in the Proceedings of the National Academy of Sciences, it is not true for the most abundant greenhouse gas: carbon dioxide. **Turning off the carbon dioxide emissions won't stop global warming**.

"People have imagined that if we stopped emitting carbon dioxide that the climate would go back to normal in 100 years or 200 years. What we're showing here is that's not right. It's essentially an irreversible change that will last for more than a thousand years," Solomon says.

This is because the oceans are currently soaking up a lot of the planet's excess heat — and a lot of the carbon dioxide put into the air. The carbon dioxide and heat will eventually start coming out of the ocean. And that will take place for many hundreds of years.

Solomon is a scientist with the National Oceanic and Atmospheric Administration. Her new study looked at the consequences of this long-term effect in terms of sea level rise and drought.

#### Solar crashing and burning now and inevitably

Floyd, 9/28/12 [The Gadsden Times, director of United Kingdom manufacturing, Goodyear Tire & Rubber Co., vice president of manufacturing and international operations, General Tire & Rubber Co., and director of manufacturing, Chrysler Corp, <http://www.gadsdentimes.com/article/20120928/NEWS/120929802>]

Energy contributions by solar and wind to the U.S. power grid are miniscule when compared to coal, oil and gas, hydro and nuclear. In addition, the renewable energies are not cost effective and it is doubtful they will be.¶ In a recent article in The Gadsden Times, a writer complained that one of the major issues for wind and solar was states lagging in incentives for solar and wind. ¶ Was the writer joking, or did he not understand that huge governmental subsidies for solar and wind power come from taxpayer dollars? ¶ The U.S. Department of Energy reported that federal subsidies for solar are $775 per megawatt hour and for wind $57 per megawatt hour. Conversely, subsidies for oil and gas are $0.64 cents per megawatt hour, hydro power was $0.82 cents, coal $0.64 cents and nuclear $3.14 per megawatt hour. The difference in the subsidy for wind and solar versus traditional energy sources is obscene.¶ In 2011 the wind turbine industry received $5 billion in subsidies, in spite of the fact it produced only 2.3 percent of the total energy used in the United States. ¶ The Wall Street Journal reported in its Aug. 18 opinion page that for every tax dollar that goes to coal, oil and natural gas, wind gets $88 and solar $1,212. Subsidy comparisons don’t consider that the oil, coal,and natural gas industries paid more than $10 billion in taxes in 2009. Wind and solar are net drains on the United States Treasury.¶ The Journal suggested that maybe it is time to eliminate all federal subsidy programs for the energy industry. This is a proposal that should be taken very seriously. Why subsidize industries that historically generate huge profits? ¶ An Indiana newspaper reported that the company E-on Climate & Renewables is in a race against time for construction of 125 wind turbines in the Tipton, Ind., area. E-on is concerned federal subsidies they now enjoy will expire at the end of 2012. That’s unlikely because subsidies for wind and solar have been around since 1992 and have been extended seven times.¶ E-on has stated that each wind turbine will generate enough electrical power for 350 homes. So it would follow that 125 turbines will generate enough power to supply 43,750 homes. This is more than enough electrical power for all of Tipton and Kokomo, Ind.¶ The problem is the cost of the power. If the two communities had to pay for the power without taxpayer help, it would bankrupt every family living in the two communities.¶ What about times when there is no wind to power the turbines? Would these communities have to supplement electrical needs with power from alternative sources?¶ As utilization goes down for traditional electrical suppliers, unit costs go up. This means that alternative power supplied by traditional sources would also increase in cost. Tipton and Kokomo would be caught in a “Catch 22.” Implementation of wind turbines is a loser for the American taxpayer until the supplies of coal, natural gas and oil are depleted. Even then new nuclear power plants could supply 90 percent or more of the United States demand. ¶ Wind farms are “feel-good projects” with enormous associated costs to the American taxpayer. For irrelevance, wind farms are only exceeded by the solar industry. Sometimes, it is not good to be No. 1. ¶ To answer the question are American taxpayers lagging in incentives for renewable energy sources? I don’t think so.¶ I understand startup costs and the time it takes to establish appropriate operating numbers. Wind and solar power are far removed from the realm of cost effectiveness. ¶ There is much doubt wind and solar will be more than a drop in the ocean in relation to contributing to power requirements for the United States.

#### Commerce Department’s tariff on Chinese parts

Benedetti 6/4/12 (Georgina, Senior Industry Analyst, “US Tariffs on Chinese Solar Panels Could Slow Industry”) <http://www.eetimes.com/electronics-news/4374479/U-S--tariffs-solar>

In reaction to this situation, seven U.S. manufacturers of crystalline silicon solar cells, led by SolarWorld, formed the Coalition for American Solar Manufacturing, with the aim to hold China accountable to U.S. and international trade laws by filing antidumping and countervailing duty trade remedy petitions. As a result, on May 24, the Commerce Department slapped stiff tariffs on imports of Chinese solar panels, imposing tariffs of 31 percent to 250 percent on Chinese solar-product imports. However, import duties on Chinese solar panels can have negative effects on the solar industry in the United States. Since the enactment of the Energy Policy Act of 2005, the U.S. government has invested in providing tax incentives and loan guarantees with the aim to promote solar energy system installations and reduce its installation and generation cost. Government incentives and renewable energy standards have been important drivers for solar energy deployment and cost reduction. However, lower solar module prices from Chinese manufacturers have also helped reduce the price of solar energy, making solar more affordable for U.S. customers and more competitive with other forms of electricity generation. Average selling module prices have decreased 28.1 percent in 2011 (with respect to 2010) in the United States. The Commerce Department's decision, coupled with the recent expiration of the Section 1603 cash grant (in lieu of the Investment Tax Credit, is projected to increase solar electricity prices in the United States, affect demand for solar panels (which may exacerbate the current oversupply of polysilicon in the industry), hurt U.S. jobs, diminish the competitiveness of solar energy relative to conventional and non-solar renewable sources of energy, and may also lead China to take retaliatory measures against U.S. solar panels manufacturers. These projections are supported by the Coalition for Affordable Solar Energy led by Sun Edison, which predicts that a 50 percent tariff would eliminate 14,000 jobs in the United States. The solar market has grown more than 100 percent during 2011. It is difficult at this point to forecast the precise effects the new tariffs will have on solar panel demand and prices, but Frost & Sullivan expects a deceleration in the industry’s growth in 2012.

#### Plan only trades off with fossil fuels

Loudermilk 2011 (Micah J. Loudermilk is a Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, May 31, 2011, “Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs,” Journal of Energy Security, <http://www.ensec.org/index.php?option=com_content&view=article&id=314:small-nuclear-reactors-and-us-energy-security-concepts-capabilities-and-costs&catid=116:content0411&Itemid=375>)

Pursuing a carbon-free world Realistically speaking, a world without nuclear power is not a world full of increased renewable usage, but rather, of fossil fuels instead. The 2007 Japanese Kashiwazaki-Kariwa nuclear outage is an excellent example of this, as is Germany’s post-Fukushima decision to shutter its nuclear plants, which, despite immense development of renewable options, will result in a heavier reliance on coal-based power as its reactors are retired, leading to a 4% increase in annual carbon emissions. On the global level, without nuclear power, carbon dioxide emissions from electricity generation would rise nearly 20% from nine to eleven billion tons per year. When examined in conjunction with the fact that an estimated 300,000 people per year die as a result of energy-based pollutants, the appeal of nuclear power expansion grows further. As the world copes simultaneously with burgeoning power demand and the need for clean energy, nuclear power remains the one consistently viable option on the table. With this in mind, it becomes even more imperative to make nuclear energy as safe as possible, as quickly as possible—a capacity which SMRs can fill with their high degree of safety and security. Additionally, due to their modular nature, SMRs can be quickly constructed and deployed widely. While this is not to say that small reactors should supplant large ones, the US would benefit from diversification and expansion of the nation’s nuclear energy portfolio.

#### Their internal link author admits natural gas prices mean solar development won’t happen

Schwartz, 12 [8/17/12, Senior Vice President for Global Relations and Strategic Planning for Salesforce.com,

an elite corporate strategy firm, specializing in future-think and scenario planning, “Abundant Natural Gas and Oil Are Putting the Kabosh on Clean Energy,” <http://www.wired.com/business/2012/08/mf_naturalgas/all/>]

But this is changing. We’ve long been acutely aware of the geopolitical ramifications of relying on Middle Eastern oil. And the threat of climate change—along with high fuel prices—has made us all realize the need for greater energy efficiency. Thankfully, technology is coming to the rescue. New methods of extracting gas and oil, combined with efficiency gains in nearly every industry, mean that we are now minimizing demand and maximizing supply. And that’s a good thing, right? Not so fast.¶ Flipping the supply-demand relationship is having some unexpected consequences. Chief among them is that, as fossil fuels become more abundant—and we consume less of them—the incentives to develop clean, renewable energy drop dramatically. As a result, we may no longer be looking at an age of increasing solar, wind, and nuclear power. Instead we are likely moving into a new hydrocarbon era. And that’s very bad news for climate change.¶ US Oil Consumption Is Down, Production Up¶ For decades Americans had an almost limitless appetite for oil, most of which was produced overseas. In the past two years, however, the trend has reversed: The US is now making more and consuming less.¶ One of the main features of America’s changing energy landscape is the new abundance of natural gas. Only a few years ago we were desperate to bring in foreign gas. Domestic gas supplies were running out, demand was rising, and prices were skyrocketing. We were struggling to build enough gas import terminals. Fast-forward to today, and we’re trying to figure out how to convert those just-finished import terminals into export facilities. What made tens of billions of dollars’ worth of brand-new infrastructure almost worthless, seemingly overnight? Shale gas.¶ The US is endowed with enormous deposits of shale—soft but brittle rock that is dense with hydrocarbons. Sometimes the hydrocarbons take the form of oil, but mostly they exist as natural gas. Over the past 30 years, the technology needed to break up those rocks and get at this gas has steadily advanced. Less than five years ago only specialty gas companies were working on accessing shale gas through hydraulic fracturing, or [fracking](http://www.youtube.com/watch?v=VY34PQUiwOQ)—using pressurized liquid to break up the rock and release the gas. But as the technique matured and the price of gas rose, major energy companies moved aggressively to exploit these new fields. The result has been an explosion in natural gas production, which has led to a 70 percent fall in gas prices since 2008 and a near collapse of the natural gas import business.¶ Natural Gas Is Becoming a Major US Export¶ With the widespread adoption of fracking technology, vast production capacity is coming online, reducing imports and transforming the US into a major natural gas exporter.¶ Cheap domestic gas will ultimately have three effects. First it will delay or kill most new competing sources of electricity production—be they coal, nuclear, solar, or anything else. Gas is now incredibly cheap and easy to acquire, while other energy sources remain expensive or hard to get (or both). Not surprisingly, gas is already winning: Coal is being pushed out, nuclear has [stalled](http://www.world-nuclear.org/info/inf41.html), and wind and solar projects are being canceled.

#### No tradeoff – abundance and France prove

**Tindale, 11** [Stephen Tindale is an associate fellow at the CER, June 2011, Center for European Reform, <http://www.cer.org.uk/sites/default/files/publications/attachments/pdf/2011/pb_thorium_june11-153.pdf>]

The money to support research and development of molten salt reactors need not be taken from renewables or other low-carbon energy supply options. There is more than enough money available in the existing subsidies for nuclear fusion. And the argument that governments which support any form of nuclear power overlook or downplay renewables is disproved by the example of France. France gets over three-quarters of its electricity from nuclear power stations. Yet the French government has supported onshore wind farms and is now giving subsides to offshore wind. It is also subsidising an expansion of the district heating system in Paris, to distribute heat from power stations burning energy crops and waste wood which would otherwise be wasted.

### 2ac adv cp

#### Steadfast barriers to exports now

Renauer, 10/2/12 [seasoned investor in the financial markets He earned his University degree in Biology before discovering the stock market Over the past decade he has become actively involved in trading individual stocks, and options. “Driving Natural Gas Prices Part 1: Exports”, <http://seekingalpha.com/article/900261-driving-natural-gas-prices-part-1-exports>]

Just a glance at the map of world estimated LNG prices and it's hard to imagine why there aren't more export terminals being constructed around the clock. Unfortunately for natural gas producers in the US, there are [regulatory](http://www.fossil.energy.gov/programs/gasregulation/authorizations/Questions.html) [hurdles](http://www.fossil.energy.gov/programs/gasregulation/authorizations/Questions.html) in place that limit exports of natural gas, especially to non free trade agreement (Non-FTA) countries.

#### And, exports increasing now

Renauer, 10/2/12 [seasoned investor in the financial markets He earned his University degree in Biology before discovering the stock market Over the past decade he has become actively involved in trading individual stocks, and options. “Driving Natural Gas Prices Part 1: Exports”, <http://seekingalpha.com/article/900261-driving-natural-gas-prices-part-1-exports>]

Not long ago Cheniere ([LNG](http://seekingalpha.com/symbol/lng)) was building import terminals out of fear that US natural gas production would not meet its needs. Now they're scrambling to build export terminals to take advantage of foreign demand for America's cheap natural gas.¶ An overabundance of natural gas in the US has prompted two developments that will drive future demand. In part one of this two part series I will focus on America's future as a natural gas exporting nation. Part two will deal with the rapid shift from gasoline and diesel to natural gas as the fuel of choice for transportation.¶ Henry Hub spot prices have been steadily increasing since overproduction in April saw them sink to below $2/MMBtu. Those low prices have led to a sharp decrease in dry gas rigs as drilling companies switch production to more lucrative liquids and oil. Fears of a storage overflow have also prompted a decrease in new natural gas rigs in the US.¶ Despite a massive reduction in rigs, the amount of natural gas produced in the US has steadily risen. The huge drop in rig counts over the winter of 2009-2010 and the latest reduction in rig counts barely makes a dent in overall dry gas production. That's what you call an increase in productivity.¶ I want to point out the graphs above and below this paragraph to illustrate just how large of an impact horizontal drilling and hydraulic fracturing have made on the productivity of natural gas rigs. Advanced extraction techniques in the US are so productive that if the natural gas rig count were allowed to rise to the levels that existed 4-5 years ago we would be floating in the stuff. Despite currently low rig counts, storage overflows of natural gas are still a legitimate concern. As you read on bear in mind that the amount of natural gas produced in the US is only a small fraction of what is possible.¶ Henry Hub spot prices are up more than 50% from the lows this April that sent share prices of natural gas producers like [Chesapeake](http://seekingalpha.com/article/897571-chesapeake-downgrades-are-an-entry-opportunity) [Energy](http://seekingalpha.com/article/897571-chesapeake-downgrades-are-an-entry-opportunity) Corporation ([CHK](http://seekingalpha.com/symbol/chk)) plummeting. Even though US natural gas prices are up significantly from April lows they are still 4 to 5 times higher than in China, Japan, South Korea, Brazil and Argentina.¶ The decision to export is an easy one for the natural gas industry, implementing it however is more difficult than you might think. The United States is set up to be a net importer of natural gas and currently has only one modern export terminal run by Cheniere Energy. Unlike oil, natural gas doesn't like to stay put. Before being pumped onto special tankers it must be cooled to its condensation point to change from a gas to a liquid. Natural gas condensation requires the type of cooling well beyond temperatures your household freezer can reach. The gas needs to be cooled to about −162 °C (−260 °F) to become a liquid at atmospheric pressure.

#### The plan is key to self-sufficient forward operating bases

Ackerman, 11 [Spencer, February 18th, Latest Pentagon Brainstorm: Nuke-Powered War Bases, Wired. Com. http://www.wired.com/dangerroom/2011/02/nuke-bases/]

Buried within Darpa’s 2012 budget request under the innocuous name of “Small Rugged Reactor Technologies” is a $10 million proposal to fuel wartime Forward Operating Bases with nuclear power. It springs from an admirable impulse: to reduce the need for troops or contractors to truck down roads littered with bombs to get power onto the base. It’s time, Darpa figures, for a “self-sufficient” FOB.¶ Only one problem. “The only known technology that has potential to address the power needs of the envisioned self-sufficient FOB,” the pitch reads, “is a nuclear-fuel reactor.” Now, bases could mitigate their energy consumption, like the [solar-powered Marine company](http://www.wired.com/dangerroom/2011/01/afghanistans-green-marines-cut-fuel-use-by-90-percent/) in Helmand Province, but that’s not enough of a game-changer for Darpa. Being self-sufficient is the goal; and that requires going nuclear; and that requires … other things.¶ To fit on a FOB, which can be anywhere from Bagram Air Field’s [eight square miles](http://www.wired.com/dangerroom/2010/08/u-s-afghan-mega-base/) to dusty collections of wooden shacks and concertina wire, the reactor would have to be “well below the scale of the smallest reactors that are being developed for domestic energy production,” Darpa acknowledges.¶ That’s not impossible, says Christine Parthemore, an energy expert at the Center for a New American Security. The Japanese and the South Africans have been working on miniature nuclear power plants for the better part of a decade; Bill Gates has [partnered with Toshiba](http://news.bbc.co.uk/2/hi/8582692.stm) to build mini-nuke sites. (Although it’s not the most auspicious sign that one prominent startup for modular reactors [suspended its operations](http://www.greentechmedia.com/articles/read/nuclear-startup-nuscale-suspends-operation/) after growing cash-light last month.) Those small sites typically use uranium enriched to about 2 percent. “It would be really, really difficult to divert the fuel” for a bomb “unless you really knew what you were doing,” Parthemore says.¶ But Darpa doesn’t want to take that chance. Only “non-proliferable fuels (i.e., fuels other than enriched uranium or plutonium) and reactor designs that are fundamentally safe will be required of reactors that may be deployed to regions where hos tile acts may compromise operations.”¶ Sensible, sure. But it limits your options: outside of uranium or plutonium, [thorium](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is the only remaining source for generating nuclear fuel. The Indians and now the Chinese have experimented with thorium for their nuclear programs, but, alas, “no one has ever successfully found a way” to build a functioning thorium reactor, Parthemore says, “in a safe and economical manner.”

Solves effective peacekeeping

Mosher et al., 8 (David E., Senior Policy Analyst @ RAND, Green Warriors: Army Environmental Considerations for Contingency Operations from Planning Through Post-Conflict, RAND)

The environment may also be important during the post-conflict phase of an operation,9 or even before combat operations end. Providing clean water, managing sewage, or providing irrigation water can be important for convincing the local populace to support the U.S. mission **and not an insurgency**, according to some commanders.10 Although these are not traditional Army missions, they can have an important effect on the outcome of an operation, from both a military and a political perspective. Addressing legacy problems can also help **a new government develop legitimacy and can enable U.S. forces to withdraw from the country sooner.** Indeed, many of the goals of stability operations defined in the 2006 edition of JP 3.0, Joint Operations, can have environmental components. Operational effectiveness can be hampered by poor environmental practices or helped by good ones. Logistics requirements and costs can be reduced by good practices, for instance, applying technologies to **reduce operational requirements for petroleum, oil,** and lubricants (POL) or field water treatment systems, or reducing acute threats to soldier health. Good environmental practices can also reduce the resources that must be diverted to address environmental issues. Commanders may also want to reduce or prevent liabilities, either financial or diplomatic. Good environmental awareness and practices during contingency operations can reduce the financial liabilities the Army and the United States may face. On more than one occasion in recent operations, contractors have removed hazardous wastes from base camps and, without Army knowledge, dumped them along the side of a road or in other inappropriate locations, sometimes to avoid disposing of them properly or to sell the drums that hold the wastes. These actions have created cleanup costs for the Army that are many times higher than the original price of the contract. In other cases, the Army has had to spend large sums to remediate serious preexisting environmental contamination at base camps, expenses that could have been avoided if the base camps had been located elsewhere. Financial liabilities can also arise from claims brought by U.S. soldiers who believe they were exposed to hazardous substances, as the Army’s past experiences with Agent Orange and Gulf War Illness illustrate. 11 Members of the local populace may also bring claims against the Army for environmentally related damage, draining funds that could be more effectively used for reconstruction or stabilization activities. Inadequate attention to environmental issues can also create diplomatic liabilities. Illegal dumping by contractors and poor waste management practices by soldiers have caused immediate diplomatic problems with host nations whose support has been critical. Long-term diplomatic problems from environmental problems can also emerge years after an operation is over. Perhaps most important are the environmental issues that can affect U.S. national objectives, those strategic political and economic objectives that U.S. leaders established when they committed forces to the contingency operation in the first place. One such national objective may be winning and maintaining support of the local populace. Although environmental conditions may be poor and national environmental laws may be weak or nonexistent, our research indicates that locals often care deeply about the environment, which can be critical to their survival, livelihood, and well-being. Vital environmental issues can include access to clean drinking water, effective sewage systems, and viable farmland (see Box 1.1). Restoring or building these basic infrastructures is often essential for the economic and social development necessary for stability. To the extent that such projects improve cooperation with locals, they can lower security risks, improve intel- ligence, and speed reconstruction. National objectives that have environmental components also include preserving natural resources that have important economic value (such as oil fields or fisheries) and even preserving cultural resources that are a matter of national, regional, religious, or cultural pride. If long-term stability of a country is a mission objective, sustainability and the long-term health of nbatural systems, including watersheds, forests, ecosystems, biodiversity, and farmlands, are also important. Local customs and practices can take the place of laws, and therefore military leaders, when designing plans and conducting operations, should understand how the local people interact with their environment. The environmental components of national objectives are often seen as falling outside the normal conception of the military mission. Because they have little to do with combat operations or military objectives, they are often not taken into consideration during the Army’s planning, training, or operations. Yet ignoring these broader political objectives **can lead to failure**, as Prussian military writer Carl von Clausewitz warned.12 Thus, the environmental dimensions of national objectives should be carefully considered. The manner in which the military conducts its operations can affect environmental outcomes upon which the success of the overall mission may depend. There is some evidence that national objectives such as stabilizing societies after conflict are now being emphasized at the Army’s combat training centers, but the degree to which environmental considerations are included is unclear.

**Global nuclear war**

Dean 95 [Jonathan, former ambassador to NATO, The Bulletin of Atomic Scientists, p. google]

IN ANY EVENT, in a world of interconnecting COMMUNICATIONS AND ENVIRONMENTAL, TRADE, AND FINANCIAL LINKS, the United States, a leading industrial trading country that needs access to raw materials and markets, usually ends up paying in one way or another when a major regional conflict erupts. IN PRACTICAL TERMS, it is impossible for the United States to avoid some degree of involvement when major regional conflicts break out. FOR 200 YEARS, THE UNITED STATES HAS BEEN URGING LIBERTY, FREEDOM, DEMOCRACY, HUMAN RIGHTS, FREE MARKET VALUES, VOLUNTARY MUTUAL AID AND COLLECTIVE SECURITY ON THE OUTSIDE WORLD. THE UNITED STATES IS THE SOLE SURVIVING WORLD-CLASS POWER, WITH MILITARY STRENGTH AND GNP FAR LARGER THAN ANY OTHER COUNTRY. AS A RESULT, when large-scale conflict erupts, the United States cannot avoid being called on for help, as it was in Somalia, Bosnia, Rwanda, and Haiti. For the United States to seek to stand aside or to respond only weakly in such cases is to risk damage to its credibility AND WORLDWIDE INFLUENCE. PRESIDENT CLINTON JUSTIFIED THE NATO BOMBING OF SERBIAN POSITIONS IN BOSNIA AND THE U.S. INVASION OF HAITI BY SAYING THAT THE CREDIBILITY AND RELIABILITY OF THE U.S. WAS AT STAKE, AS IT WAS. IT IS TRUE THAT PAST ADMINISTRATIONS USED SIMILAR ARGUMENTS TO JUSTIFY CONTINUED U.S. INVOLVEMENT IN VIETNAM LONG AFTER IT WOULD HAVE BEEN WISE TO WITHDRAW. NONETHELESS, WHEN THE COLLECTIVE DISAPPOINTMENT OF WORLD OPINION OVER THE BEHAVIOR OF THE UNITED STATES (OR OF ANY MAJOR COUNTRY) BECOMES INTENSE AND ENDURING, IT BEGINS TO UNDERMINE THE INTERNATIONAL PRESTIGE AND STANDING OF THE ENTIRE NATION CONSIDERABLE DIMINUTION OF U.S. STATURE AND INFLUENCE HAS ALREADY TAKEN PLACE OVER THE PAST FOUR OR FIVE YEARS IN CONNECTION WITH FALTERING U.S. POLICIES TOWARD BOSNIA, SOMALIA, AND RWANDA. FORTUNATELY, AMERICANS ARE NOT SPARTANS, ROMANS OR PRUSSIANS-SELF-DISCIPLINED MILITARISTIC PEOPLES WHO CONSIDERED IT A MATTER OF NATIONAL PRIDE NOT TO RECOIL FROM CONFLICT BECAUSE OF CASUALTIES AMONG THEIR FORCES. HOWEVER, IF THE TRENDS CONTINUE THAT UNDERLIE THE PUBLIC OUTRAGE THAT FOLLOWED THE DEATH OF U.S. SERVICEMEN IN SOMALIA, AND U.S. ADMINISTRATIONS CONTINUE TO ABSTAIN FROM PEACEKEEPING ACTIVITIES BECAUSE THEY COULD ENTAIL CASUALTIES, THE UNITED STATES WILL NOT LONG REMAIN A WORLD POWER. If U.S. national prestige declines further under conditions like these, the U.S. capacity to constructively influence the course of events without the use of force will decrease. And when force must be used, the United States may have to use more of it to be effective. EXPERTS THROUGHOUT THE WORLD EXPECT GROWING POPULATION PRESSURES AND INCREASING ENVIRONMENTAL STRESS TO DEVELOP OVER THE COMING DECADES INTO INTENSE, FAR-REACHING SOCIAL UNREST AND REGIONAL CONFLICT. ECONOMIC DEVELOPMENT IS THE SOLUTION, HOWEVER SLOW AND UNCERTAIN IT MAY BE IN COMING. BUT the world also needs effective regional conflict-prevention procedures. Left on its own, regional violence can lead to **confrontation** and even **war between the great powers**, including the United States, AS MIGHT OCCUR, FOR EXAMPLE, in the event of conflict between Ukraine and Russia or between China and its neighbors. IN THE FINAL ANALYSIS, unchecked regional violence and the fear of further violence will lead **more states to develop nuclear weapons**. IN PAST DECADES, this process occurred in Israel, South Africa, India, Pakistan, IRAQ, and PRESUMABLY, IN North Korea. A world with 20 or 30 nuclear weapon states would not only make a more effective global security system impossible, it would lead the present nuclear weapon states to modernize and increase their weapons-and it would markedly increase the vulnerability of the United States to direct attack. Instead of SHRUGGING AT HUMAN FALLIBILITY, accepting war as inevitable, AND REACTING AFTER IT HAPPENS, U.S. policy should aim at establishing an international peacekeeping system that can head off an increasing number of conflicts. CONSEQUENCES IF THIS REASONING IS ACCEPTED, THE ADMINISTRATION SHOULD DECIDE ON AND PUBLICLY DECLARE AN EXPLICIT LONG-TERM POLICY OF JOINING WITH OTHER COUNTRIES IN SEEKING A GRADUAL LOWERING OF THE LEVEL OF ARMED CONFLICT IN THE WORLD THROUGH PREVENTING A GROWING PROPORTION OF POTENTIAL WARS AND CURTAILING WARS WHEN THEY DO OCCUR. This goal would be achieved by building an increasingly effective worldwide network of regional conflict-prevention and peacekeeping organizations headed by a more effective United Nations.

### 2ac states cp

#### Doesn’t solve any of the case – 1ac Wallace says the fed gov controls prolif policy – only the plan is viewed as credible

#### And, it doesn’t cause tech transfers – that is an exclusive federal domain – that’s Hargraves

#### I2ICE says federal investment key to effective investment because the EPA act was the previous catalyst for investment

#### Permutation do both

#### And, 50 state fiat is a voting issue – no decision makers controls state policy, kills logic which justifies infinite intrinsicness – no solvency advocate kills fairness and undermines core research skills – kills real world education

#### Federal guarantees are vital to getting investors on board – superior credit rating

**Sullivan and Walsh, 8 -** Mary Anne Sullivan, partner in Hogan & Hartson's energy practice, has more than 25 years of experience as an energy lawyer. She previously served as general counsel of the U.S. Department of Energy and as deputy general counsel for environment and nuclear programs. Sam Walsh is an associate at Hogan & Hartson (“Federal Loan Guarantees,” Electric Light and Power, Mar/April, ABI Inform)

In their rulemaking comments, Wall Street firms emphasized that a loan guarantee must represent the unconditional commitment of the full faith and credit of the United States if the program is to succeed in attracting affordable private investment to innovative technologies. The final rule seems to have calmed concerns that the guarantees might be conditioned in a way that would preclude the "AAA" rating for the federally guaranteed debt that the program was designed to assure. The guarantees will be absolute, absent fraud or material misrepresentation by the holder of a guaranteed obligation.

#### State incentives fail – federal loan guarantees attract substantially more investment capital

**NEI, 11** – Nuclear Energy Institute “Issues in Focus Loan Guarantees For Clean Energy Development” http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCkQFjAB&url=http%3A%2F%2Fwww.nei.org%2Ffilefolder%2Floanguaranteefastfacts.pdf&ei=PCJsUNTiJKbA2gXymYAg&usg=AFQjCNEzvSlK0TiMZStFOzXeQDIf76vQBw)

State governments are doing their part. Many of the states where new nuclear plants are planned – including Florida, Virginia, Texas, Louisiana, Mississippi, North Carolina and South Carolina – have passed legislation or implemented new regulations to encourage construction of new nuclear power plants by providing financing support and/or assurance of investment recovery.

By itself, this state support is not sufficient. The federal government must also provide financing support for deployment of clean energy technologies in the numbers necessary to address growing U.S. electricity needs and reduce carbon emissions. The clean energy loan guarantee program authorized by the Energy Policy Act of 2005 is equally important.

Although tax stimulus – either in the form of tax credits or more favorable depreciation terms – can play an important role in encouraging investment, loan guarantees are a very efficient way to mobilize private capital. Tax benefits have a direct, dollar-for-dollar impact on the federal budget. Even if the credit subsidy cost associated with a loan guarantee is appropriated, loan guarantees provide substantial leverage. Tens of millions of dollars in appropriations to support a loan guarantee program can leverage tens of billions of dollars in private sector investment.

#### Certainty is essential – only effective method of catalyzing investment

**Trembath, 11** [2/4/11, [Nuclear Power and the Future of Post-Partisan Energy Policy](http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/), Alex Trembath is a policy associate in the Energy and Climate Program at Breakthrough. He is the lead or co-author of several Breakthrough publications, including the 2012 report "Beyond Boom and Bust: Putting Clean Tech on a Path to Subsidy Independence" and "Where the Shale Gas Revolution Came From." Alex is a graduate of University of California at Berkeley, <http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/>]

If there is one field of the energy sector for which certainty of political will and government policy is essential, it is nuclear power. High up front costs for the private industry, extreme regulatory oversight and public wariness necessitate a committed government partner for private firms investing in nuclear technology. In a new [report](http://www.thirdway.org/publications/370) on the potential for a “nuclear renaissance,” Third Way references the failed cap-and-trade bill, delaying tactics in the House vis-a-vis EPA regulations on CO₂, and the recent election results to emphasize the difficult current political environment for advancing new nuclear policy. The report, “The Future of Nuclear Energy,” makes the case for political certainty: “It is difficult for energy producers and users to estimate the relative price for nuclear-generated energy compared to fossil fuel alternatives (e.g. natural gas)–an essential consideration in making the major capital investment decision necessary for new energy production that will be in place for decades.” Are our politicians willing to match the level of certainty that the nuclear industry demands? Lacking a suitable price on carbon that may have been achieved by a cap-and-trade bill removes one primary policy instrument for making nuclear power more cost-competitive with fossil fuels. The impetus on Congress, therefore, will be to shift from demand-side “pull” energy policies (that increase demand for clean tech by raising the price of dirty energy) to [supply-side “push” policies](http://leadenergy.org/2010/09/supply-demand-energy-innovation/), or industrial and innovation policies. Fortunately, there are signals from political and thought leaders that a package of policies may emerge to incentivize alternative energy sources that include nuclear power. One place to start is the recently deceased American Power Act, addressed above, authored originally by Senators Kerry, Graham and Lieberman. Before its final and disappointing incarnation, the bill [included](http://www.huffingtonpost.com/2010/05/12/american-power-act-photos_n_573643.html#s90041&title=undefined) provisions to increase loan guarantees for nuclear power plant construction in addition to other tax incentives. Loan guarantees are probably the most important method of government involvement in new plant construction, given the high capital costs of development. One wonders what the fate of the bill, or a less ambitious set of its provisions, would have been had Republican Senator Graham not abdicated and removed any hope of Republican co-sponsorship. But that was last year. The changing of the guard in Congress makes this a whole different game, and the once feasible support for nuclear technology on either side of the aisle must be reevaluated. A New York Times [piece](http://www.nytimes.com/2010/11/17/business/energy-environment/17NUCLEAR.html) in the aftermath of the elections forecast a difficult road ahead for nuclear energy policy, but did note Republican support for programs like a waste disposal site and loan guarantees. Republican support for nuclear energy has roots in the most significant recent energy legislation, the Energy Policy Act of 2005, which passed provisions for nuclear power with wide bipartisan support. Reaching out to Republicans on policies they have supported in the past should be a goal of Democrats who wish to form a foundational debate on moving the policy forward. There are also signals that key Republicans, notably [Lindsey Graham](http://washingtonindependent.com/99171/graham-circulating-clean-energy-standard) and [Richard Lugar](http://www.plattsenergyweektv.com/story.aspx?storyid=132784&catid=293), would throw their support behind a clean energy standard that includes nuclear and CCS. Republicans in Congress will find intellectual support from a group that AEL’s Teryn Norris coined [“innovation hawks,”](http://leadenergy.org/2011/01/the-rise-of-innovation-hawks/) among them Steven Hayward, David Brooks and George Will. Will has been [particularly outspoken](http://www.newsweek.com/2010/04/08/this-nuclear-option-is-nuclear.html) in support of nuclear energy, writing in 2010 that “it is a travesty that the nation that first harnessed nuclear energy has neglected it so long because fads about supposed ‘green energy’ and superstitions about nuclear power’s dangers.” The extreme reluctance of Republicans to cooperate with Democrats over the last two years is only the first step, as any legislation will have to overcome Democrats’ traditional opposition to nuclear energy. However, here again there is reason for optimism. Barbara Boxer and John Kerry bucked their party’s long-time aversion to nuclear in a precursor bill to APA, and Kerry continued working on the issue during 2010. Jeff Bingaman, in a speech earlier this week, reversed his position on the issue by calling for the inclusion of nuclear energy provisions in a clean energy standard. The Huffington Post [reports](http://www.huffingtonpost.com/2011/02/01/sen-jeff-bingaman-backs-n_n_816864.html) that “the White House reached out to his committee [Senate Energy] to help develop the clean energy plan through legislation.” This development in itself potentially mitigates two of the largest obstacle standing in the way of progress on comprehensive energy legislation: lack of a bill, and lack of high profile sponsors. Democrats can also direct [Section 48C](http://leadenergy.org/2010/12/clean-energy-financing-first-steps-towards-post-partisan-effort/#more-3320) of the American Recovery and Reinvestment Act of 2009 towards nuclear technology, which provides a tax credit for companies that engage in clean tech manufacturing. Democrats should not give up on their policy goals simply because they no longer enjoy broad majorities in both Houses, and Republicans should not spend all their time holding symbolic repeal votes on the Obama Administration’s accomplishments. The lame-duck votes in December on “Don’t Ask, Don’t Tell,” the tax cut deal and START indicate that at least a few Republicans are willing to work together with Democrats in a divided Congress, and that is precisely what nuclear energy needs moving forward. It will require an agressive push from the White House, and a concerted effort from both parties’ leadership, but the road for forging bipartisan legislation is not an impassable one. The politician with perhaps the single greatest leverage over the future of nuclear energy is President Obama, and his rhetoric matches the challenge posed by our aging and poisonous energy infrastructure. “This is our generation’s Sputnik moment,” announced Obama recently. Echoing the calls of presidents past, the President used his [State of the Union](http://www.slate.com/id/2281847/) podium to signal a newly invigorated industrialism in the United States. He advocated broadly for renewed investment in infrastructure, education, and technological innovation. And he did so in a room with many more members of the opposition party than at any point during the first half of his term. The eagerness of the President to combine left and right agendas can hopefully match the hyper-partisan bitterness that dominates our political culture, and nuclear power maybe one sector of our economy to benefit from his political leadership.

### 2ac elections

#### Bunch of alt causes to relations – even Obama can’t solve

RFE 10-3-2012; Lavrov Says Russia-U.S. 'Reset' Can't Last Forever http://www.rferl.org/content/lavrov-says-us-russia-reset-cant-last-forever/24727492.html

Russian Foreign Minister Sergei Lavrov has warned that Russia and the United States should do more to strengthen mutual economic ties because the "reset" in relations cannot go on indefinitely. In a wide-ranging interview with the "Kommersant" daily published on October 3, said a reset cannot last forever, as "otherwise it would not be a reset but a program failure." He suggested that instead, Moscow and Washington should think about how to "update the software." U.S. President Barack Obama called for the reset in relations before taking office in 2008, but relations have been strained by differences over issues such as missile defense, human rights, and the conflict in Syria. Russian-U.S. relations were most recently strained by Moscow's decision to halt the activities of the U.S. Agency for International Development (USAID). Washington has called the move "regrettable" and rejected Russian allegations that USAID was meddling in Russian politics. Who's 'Hostile'? Lavrov said USAID was involved through its grants in some "dubious" projects, in particular in the North Caucasus. Russian foreign-policy expert Fyodor Lukyanov, the editor of the journal "Russia In Global Affairs" told RFE/RL that Moscow viewed any rights activities financed from abroad in the region "automatically as hostile." Lukyanov said that is because of the volatility of the North Caucasus. "What is referred to here is the support of various rights organizations that carry out investigations or defend the rights of people who are being persecuted by either federal or local authorities -- in short, rights organizations that criticize the policies of Russia or of regional authorities in the North Caucasus," Lukyanov said. "Since Moscow considers this region highly explosive, any human rights activity financed from abroad is automatically viewed as hostile." Dangerous Mix Lavrov also warned against "mixing trade with politics" by adopting the so-called Magnitsky bill currently under consideration in the U.S. Congress. Lukyanov said there was no doubt the bill will be adopted and that Lavrov was simply "stating the obvious." "It will definitely be adopted," Lukyanov said. "There is a consistant majority in Congress that considers it necessary to adopt it, for various reasons. I think it will be adopted, Lavrov is simply stating the obvious." The bill, named after lawyer Sergei Magnitsky, who died in pretrial detention amid torture allegations three years ago, would link trade benefits to Russia with sanctions against Russian officials responsible for human rights violations. 'Sowing Winds' Lavrov also accused Western media of distorting Russia's image. He dismissed allegations that the jailing of three members of the Pussy Riot punk band was politically motivated and part of a crackdown on the opposition as a "propaganda campaign." The three women were sentenced to two years in prison in August for performing a song against President Vladimir Putin in Moscow's Orthodox Cathedral. Lavrov said Western powers, by supporting insurgents in the Middle East, have "sown winds to reap a storm." He said backing calls for President Bashar al-Assad to step down to end the conflict in Syria would be "instigating continuing the fratricidal war" at the cost of thousands of lives.

#### Russian relations are structurally impossible

Cohen, 2/28/12 [Professor, Russian Studies at New York University, America's Failed (Bi-Partisan) Russia Policy, <http://www.huffingtonpost.com/stephen-f-cohen/us-russia-policy_b_1307727.html?ref=politics&ir=Politics>]

2. Vital cooperation will **not be possible** (or stable), however, as long as Washington continues to promote NATO expansion along Russia's borders. This must stop, which means no longer encouraging membership for Georgia or Ukraine. Membership for either would cross Moscow's declared "red lines." The proxy American-Russian war in Georgia, in August 2008, which risked a nuclear confrontation like the 1962 Cuban Missile Crisis, was an unmistakable warning. (Russia has a right, as the United States asserted for itself in that crisis, to be free of menacing foreign military bases near its territory.)

3. But the thirteen-year expansion of NATO to Russia's borders has already institutionalized the worst geo-political, and potentially military, U.S.-Russian conflict. The new NATO members cannot be expelled, but Washington should now honor its promise, also broken, that those countries would not host any NATO or U.S. military installations. Honoring that pledge would, in effect, de-militarize NATO expansion and considerably lessen Moscow's anxieties, resentments and resistance to new forms of security cooperation, including on missile defense and deeper nuclear reductions on both sides.

4. Finally, "democracy-promotion" measures inside Russia also must stop. Many proponents of this two-decade U.S. policy sincerely believe in it, but it is wrong on all counts:

- We, the United States, do not have the right, wisdom or power to intervene so directly or deeply in the internal workings of another great nation, especially one whose history is older, different and no less proud than our own. (Russians have shown they know how to democratize their country. To suggest that they do not is contemptuous and an ethnic slur.)

- Here too the proof is in the factual record. Since the 1990s, U.S.-sponsored "democracy-promotion" inside Russia has done more to undermine democratic prospects there than to promote them.

- Even worse, "democracy-promoters" and leaders of opposition groups they sponsor are moving in a profoundly reckless direction. Increasingly, they speak of "delegitimizing" and "de-stabilizing" Russia's political system, even of a "revolution," but without asking what that might mean for a vast state with uncertain control over its enormous, sprawling quantities of devices of mass destruction. When the Russian state suddenly disintegrated in 1991, this kind of catastrophe was averted. But miracles rarely, if ever, happen twice.

The policy changes I propose are, of course, unlikely to be adopted. After twenty years, many powerful American interests are **invested in the existing policy**, however badly it has failed. But it is not enough to blame the U.S. political and media establishments. American critics of Washington's longstanding approach to Moscow also bear some responsibility: They have not fought for the nation's best interests.

#### Romney’s all talk---he’d work with Russia

Gasyuk 12 (Gasyuk, Rossiyskaya Gazeta’s Washington D.C. correspondent, 6-13, “Romney keeps the gloves off”, http://rbth.ru/articles/2012/06/13/romney\_keeps\_the\_gloves\_off\_15854.html)

Given the sharp disagreements between the United States and Russia on Syria, which is now careening toward civil war, Republicans will harshly criticize every attempt by Obama to further emphasize any progress in bilateral relations. “Some realism regarding U.S.-Russia relations would be constructive for the White House if it wants to avoid Republican attacks,” Simes told Russia Now. But this doesn’t mean that presumptive GOP nominee Mitt Romney, if elected, will transform his public anti-Russian statements into political practice. “I believe that most likely Governor Romney believes in the statements he made, but that does not mean that in practice this rhetoric will be his guide for action,” Simes said. “Many statements from the GOP candidates including those on foreign affairs surely have to be taken in the context of the political and electoral reality in the U.S.,” Aron said. “It is not only possible, but highly probable,” that Mitt Romney’s views on Russia will evolve if he is elected, Simes said. American political history is rife with examples of strategic U-turns that begin the morning after the inauguration balls. When Dwight Eisenhower ran for president, his advisers—such as the famous John Foster Dulles—spoke of Harry Truman’s “cowardly” policy of containment of the Soviet Union and called for the speedy liberation of Eastern Europe. However President Eisenhower instead started the process of normalizing relations through personal meetings with Nikita Khrushchev in 1955 and 1959. President Richard Nixon was viewed as a leading anti-Communist, but it was Nixon who found the way toward detente. Nixon made the first-ever trip by an American president to then-Communist Russia in 1972, but also opened the door to dialogue with Communist China. No one should be too surprised that Mitt Romney, if elected, might rethink his position. When needed for supply routes, Russia is no longer America’s “number one geopolitical foe.” As a president, many observers believe he would take a more realistic approach to handling bilateral ties.

#### Romney is done, it’s not reversible

**Rothkopf, 10/1/**12 - CEO and Editor-at-Large of Foreign Policy (David, Foreign Policy, The Election Is Over,

<http://www.foreignpolicy.com/articles/2012/10/01/election_effectively_over_it_s_time_to_start_worrying_about_2013>)

It's the first of October, and here's your October surprise: October is already over. So is the first week of November. The campaign is over. The voters have decided. The only remaining step is watching as the clock strikes midnight after Election Day is done and Mitt Romney disappears from the American political scene like Cinderella's coach.

Poof. What was that fellow's name again?

This is a surprise because the United States remains a deeply divided country politically. Opposition to the president remains strong, and his record remains spotty at best. It is a surprise because the past few weeks have seen bad news on the economic front and the unraveling of the story that Barack Obama is a foreign-policy master.

The race should be closer. By some reasoning, Romney should even be ahead. Heck, if Romney had gone on vacation to Lake Winnipesaukee for the past three weeks, he might be. But every time events have turned against the president -- from weak job numbers to bad manufacturing results, from the debacle in Libya to the rapid deterioration in Iraq, Afghanistan, Syria, and U.S.-Israel relations -- Romney has come to Obama's rescue with a boneheaded statement or some distracting gaffe of his own.

So now the swing-state polls suggest it is highly unlikely that the Republican candidate can orchestrate a victory. Behind by 9 percentage points in the latest Columbus Dispatch poll in the state he must win, Ohio, and trailing in eight of the nine Florida polls tracked by RealClearPolitics, Mitt has no clear path to 270 electoral votes. The media will spin this election up and down between now and Nov. 6 to try to create the illusion of drama, but stick a fork in it: The Romney goose is cooked.

Although this might be a letdown for political junkies, it is a relief for normal people who can tune out the incessant, mind-numbing, serially prevaricating television spots for the candidates and get on with their lives. Better to look ahead instead and start doing the planning for 2013 that the Obama White House, senior-level sources tell me, is not really doing right now. They're caught up in the election, and as a result they are letting a lot of big issues slide.

#### Jobs report will have a bigger effect than the plan

**Reich, 10/1**/12 - Chancellor’s Professor of Public Policy at the Goldman School of Public Policy at the University of California at Berkeley (Robert, “Bigger than the debates? Friday’s jobs report” Salon,

<http://www.salon.com/2012/10/01/bigger_than_the_debates_fridays_jobs_report/>

The biggest election news this week won’t be who wins the presidential debate Wednesday night. It will be how many new jobs were created in September, announced Friday morning by the Bureau of Labor Statistics.

Rarely in the history has the monthly employment carried so much political significance. If the payroll survey is significantly more than 96,000 –- the number of new jobs created in August — President Obama can credibly claim the job situation is improving. If significantly fewer than 96,000, Mitt Romney has the more credible claim that the economy isn’t improving.

August’s household survey showed the overall rate of unemployment to be 8.1 percent in August – not bad, relative to previous rates – but that was mainly because so many Americans had stopped looking for work. (You’re deemed “unemployed” only if you don’t have a full-time job and you’re looking for work; if you’ve given up looking, you’re not counted.)

What happened to jobs in August or September – and what will happen in October (announced November 2, just days before Election Day) – have very little to do with what Obama did or didn’t do. Presidents have little to do with month-to-month changes in employment.

What’s more, the rest of the world isn’t cooperating: Much of Europe is in recession because it’s swallowed the “austerity” cool-aide. Japan is still a basket case. And China is slowing considerably.

In addition, Obama has had to grapple with a recalcitrant Republican congress, whose “number one goal,” according to Senate Minority Leader Mitch McConnell, hasn’t been to create more jobs but to make sure Obama doesn’t get a second term.

Still, evidence is accumulating that the U.S. economy has stalled. According to Commerce Department data released late last week, the economy grew at an annualized rate of only 1.3 percent between April and June. That’s down from 2 percent in the first quarter of the year. Consumer spending rose in August just .1 percent, after adjusting for inflation. Orders for durable goods (cars, TVs, other long-lasting manufactured products) dropped 13 percent, the biggest monthly drop in three years. And because incomes grew less than spending, the savings rate dropped to 3.7 percent — the lowest since April.

#### Eurozone action will outweigh the plan

**Weisenthal, 9/26**/12 - Prior to joining Business Insider in October 2008, Joe was a correspondent for paidContent.org, as well as the Opening Bell editor at Dealbreaker.com. He previously was a writer and analyst for Techdirt.com, and before that worked as an analyst for money management firm Prentiss Smith & Co (Joe, “We're Getting A Glimpse Of Barack Obama's Worst Nightmare” Business Insider, http://www.businessinsider.com/obamas-worst-nightmare-2012-9#ixzz289W0KygN)

This doesn't necessarily seem likely, but the latest turns and twists of the global economy open up a scenario whereby markets could get really ugly between now and the election.

Basically, we present a plausible scenario in which things get bad on two fronts. The scenario is based on developments over the last several days.

Here's how it could go:

First, Europe really stalls out.

Thanks to the political crisis in Spain, suddenly it's not clear if the ECB's powerful bond buying program will ever get off the ground.

Remember, the ECB has announced a plan to backstop government bonds, but it needs the countries to request aid and submit to outside fiscal supervision. Because of mass protests, and a burgeoning secession movement in Catalonia, Spanish PM Mariano Rajoy is very reluctant to ask for a bailout unless it's absolutely necessary. He'd like to delay the request as long as possible.

In addition, you have heightening squabbles over what will be done with Greece (raising the specter that it will leave the Eurozone). There are more and more reports about HUGE holds in the government's budget, and the various creditor parties are fighting about who will take the hit. The specter of Greece leaving the Eurozone is rising.

This could then start hitting markets in the US. Actually that already seems to be happening. The market's dropping. And now we no longer have an implied "put" from the Fed, since it's already blown its wad (or so it seems) with the announcement of open-ended QE.

Already, the market has been weak since QE3 was announced, and in particular, the oil & gas/basic materials stocks that people associate with reflation have been weak.

Those two sectors, which are supposed to rise on successful reflation, make up 2 out of 3 of the worst performing S&P sectors today.

This could be a nothing blip, but a series of weeks like this one (riots in Europe, which inevitably remind people about government debt) and markets in the US reacting badly could be the "October Surprise" that Romney needs to win.

#### No Romney traction – even if voters hate Obama’s energy policy they won’t shift to Romney

Lewis, 10/1/12 - senior contributor to The Daily Caller (Matt, The Daily Caller, “Mitt Romney’s struggle to win blue collar Ohio voters”

This sounds trivial, but it matters greatly — especially in places like Ohio.

The Atlantic’s Molly Ball is consistently a “must read,” and her latest column reinforces a point I’ve been making for a long time — that Mitt Romney is in danger of under-performing with working-class whites in key states like the Buckeye state. (Ball’s teaser says it all: “In Appalachian coal country, Romney is now viewed with nearly as much suspicion as Obama — and that may be the story of the 2012 election.”)

There is at least one substantive reason for these voters to be skeptical of Romney. While interviewing Ohio voters, Ball stumbled over an interesting blast from the past:

It turns out Romney, as governor of Massachusetts in 2003, held a press conference in front of a coal-fired power plant. “I will not create jobs or hold jobs that kill people,” he said, and then, gesturing at the facility behind him: “That plant, that plant kills people.” You can see the footage in an Obama campaign ad that’s been airing heavily here. It seems to have made an impression.

The notion that Romney would be worse for coal than Obama seems absurd. Still, Obama is using the line to effectively muddy the waters. All he really needs is for voters to conclude, “they’re both bad,” and Obama can consider that a victory. Ball sums it up thusly,

I heard it over and over again from Ohioans — the idea that Romney stands for the wealthy and not for them. Obama’s depiction of his rival as an out-of-touch rich guy, which has gotten no little assistance from Romney himself, has made a deep and effective impression with these self-consciously working-class voters.

#### Energy won’t switch votes

**Farnam, 12** (T.W. Washington Post, Energy ads flood TV in swing states, 6/27, <http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V_story.html>)

Energy issues don’t spark much excitement among voters, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy.

And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads.

The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry.

Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.”

Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag.

In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway.

When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, fewer than 1 percent mention energy.

#### Too late to change the election- ideology

Helling ’12 (DAVE HELLING, McClatchy Newspapers Miami Herald 7-22-12 "Is the race for president already over?"

But **a growing number** of **political scientists and campaign consultants** - backed by the **latest polling data** - think the daily campaign back-and-forth **is having no significant effect on voters.** Most Americans have **locked in** their presidential decisions, polls released Thursday suggested, and the already small number of persuadable voters **shrinks by the hour**. Put another way: America could vote for president next week, and the outcome would probably be the same as it will be in November. "That's accurate, barring some really big, big event or change in the political environment," said Alan Abramowitz, a political science professor at Emory University in Atlanta, who has studied presidential voting patterns. Kenneth Warren, a political science professor at St. Louis University, agreed. "Most people have decided who they're going to vote for early on," he said. Recent polls show those who have decided are split almost evenly between Obama and Romney. In a CBS/New York Times poll, Romney led by 1 point. In a Fox News poll, he trailed Obama by 4 points. A National Public Radio poll found Obama leading by 2 points. A Gallup tracking poll over the same time period showed the race dead even. The average of polls puts the Obama advantage at 1.2 percent, according to Real Clear Politics, a political aggregation website. The incumbent has led Romney in that average by a one- to two-point margin since last October. Political scientists and consultants said there were several reasons for early presidential decision-making. In an Internet-cable-TV age, **voters are pounded with political messages daily, helping them make up their minds far in advance** of the election. An incumbent in the race makes at least one of the candidates a known quantity. And American **voters are deeply divided, further cementing their choices.**

#### Jobs and gas prices ensure public support---SMRs aren’t an election issue but if they were, links non U

Johnson 12 John, Nuclear Energy Insider, April 25, "US Campaign Trail: is nuclear in the equation?", analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation

In the next Presidential election, American voters will be voting with their pockets. We look at how the campaign so far has revealed which candidate will support nuclear R&D, nuclear new-build projects and ultimately preserve and create nuclear sector jobs. As the U.S. Presidential election draws closer, Americans are most concerned about job creation and how the candidates plan to boost the U.S. economy. Alternative energy policies have received a fair amount of publicity from the Obama administration, although nuclear power specifically is rarely mentioned on the campaign trial, primarily due to perceived safety questions. Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019. “There is certainly political consensus in support of clean generation, and large scale cultural consensus as well,” said Keeley. Political benefits of nuclear support As gas prices in the U.S. continue to soar, it’s possible that the tide will turn more in favor of nuclear and other clean energy sources, especially as electric cars take a stronger foothold. In addition, the job creation benefits from nuclear could work their way into the political landscape as well. The two new Vogtle nuclear plants are expected to create approximately 5,000 on-site jobs during the peak of construction, with 800 high paying jobs remaining over the life of the plant.

#### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the develop

ment of new reactors."

#### Winners win elections- the plan is key to Obama’s momentum

Creamer, 11 – political strategist for over four decades

(Robert, he and his firm, Democracy Partners, work with many of the country’s most significant issue campaigns, one of the major architects and organizers of the successful campaign to defeat the privatization of Social Security, he has been a consultant to the campaigns to end the war in Iraq, pass health care, pass Wall Street reform, he has also worked on hundreds of electoral campaigns at the local, state and national level, "Why GOP Collapse on the Payroll Tax Could be a Turning Point Moment," Huffington Post, 12-23-11, www.huffingtonpost.com/robert-creamer/why-gop-collapse-on-the-p\_b\_1167491.html, accessed 9-1-12, mss)

2). Strength and victory are **enormous political assets.** Going into the New Year, they now belong to the President and the Democrats. One of the reasons why the debt ceiling battle inflicted political damage on President Obama is that it made him appear ineffectual - a powerful figure who had been ensnared and held hostage by the Lilliputian pettiness of hundreds of swarming Tea Party ideological zealots. In the last few months -- as he campaigned for the American Jobs Act -- he has shaken free of those bonds. Now voters have just watched James Bond or Indiana Jones escape and turn the tables on his adversary. Great stories are about a protagonist who meets and overcomes a challenge and is victorious. The capitulation of the House Tea Party Republicans is so important because it feels like the beginning of that kind of heroic narrative. Even today most Americans believe that George Bush and the big Wall Street Banks - not by President Obama -- caused the economic crisis. Swing voters have never lost their fondness for the President and don't doubt his sincerity. But they had begun to doubt his effectiveness. They have had increasing doubts that Obama was up to the challenge of leading them back to economic prosperity. The narrative set in motion by the events of the last several weeks could be a turning point in voter perception. It could well begin to convince skeptical voters that Obama is precisely the kind of leader they thought he was back in 2008 - a guy with the ability to lead them out of adversity - a leader with the strength, patience, skill, will and resoluteness to lead them to victory. That now contrasts with the sheer political incompetence of the House Republican Leadership that allowed themselves to be cornered and now find themselves in political disarray. And it certainly contrasts with the political circus we have been watching in the Republican Presidential primary campaign. 3). This victory will inspire the dispirited Democratic base. Inspiration is the feeling of empowerment - the feeling that you are part of something larger than yourself and can personally play a significant role in achieving that goal. It comes from feeling that together you can overcome challenges and win. Nothing will do more to inspire committed Democrats than the sight of their leader -- President Obama - out maneuvering the House Republicans and forcing them into complete capitulation. The events of the last several weeks will send a jolt of electricity through the Progressive community. The right is counting on Progressives to be demoralized and dispirited in the coming election. The President's victory on the payroll tax and unemployment will make it ever more likely that they will be wrong. 4). When you have them on the run, that's the time to chase them. The most important thing about the outcome of the battle over the payroll tax and unemployment is that it shifts the political momentum at a critical time. Momentum is an independent variable in any competitive activity - including politics. In a football or basketball game you can feel the momentum shift. The tide of battle is all about momentum. The same is true in politics. And in politics it is even more important because the "spectators" are also the players - the voters. **People** follow - and **vote -- for winners**. The bandwagon effect is enormously important in political decision-making. Human beings like to travel in packs. They like to be at the center of the mainstream. Momentum shifts affect their perceptions of the mainstream. For the last two years, the right wing has been on the offensive. Its Tea Party shock troops took the battle to Democratic Members of Congress. In the Mid-Terms Democrats were routed in district after district. Now the tide has turned. And when the tide turns -when you have them on the run - that's the time to chase them.

### 1ar

#### And, the plan accelerates development

Barton, ‘9

[Charles, retired counselor, writes for Energy From Thorium, “The Liquid Fluoride Thorium Paradigm,” http://www.theoildrum.com/node/4971/]

The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. That is a safe assumption under "business-as-usual”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables?

#### The tech is realistic – basis is robust

Frye 8 [Copyright (c) 2008 Energy Bar Association Energy Law Journal 2008 Energy Law Journal 29 Energy L. J. 279 LENGTH: 54433 words ARTICLE: THE CURRENT "NUCLEAR RENAISSANCE" IN THE UNITED STATES, ITS UNDERLYING REASONS, AND ITS POTENTIAL PITFALLS NAME: Roland M. Frye, Jr.\* BIO: \* Mr. Frye has practiced in the field of federal energy regulation for thirty-one years, in both the public and private sectors, and has served for the last sixteen years as the Senior Attorney in the Office of Commission Appellate Adjudication of the United States Nuclear Regulatory Commission (NRC), p. lexis]

Other scientists have been exploring thorium as a possible fuel for nuclear reactors, and have made major strides in designing such a reactor. According to a recent reports, such a thorium-fueled reactor would not suffer a meltdown, would generate spent fuel which would remain radioactive for only about 500 years, would create either no weapons-grade byproducts at all or would create material that (due to intense gamma radiation) would be very difficult for bomb-makers to handle, would actually incinerate any plutonium that was added to the fuel mix (helping to dispose of high-level spent fuel from both nuclear reactor fuel and decommissioned nuclear weapons) - oh, and it also would generate cheap electricity. [n338](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n338) The idea of a thorium reactor is not mere pie-in-the-sky scientific theory - one American company, Thorium Power Ltd., is devoted solely to the development and promotion of thorium as a fuel for nuclear power plants, with [\*328] fuel specifically designed both to be proliferation-resistant and to reduce spent-fuel volume. Moreover, for plants seeking to burn off excess plutonium, the plutonium seed in the thorium fuel assembly burns "about three times faster and at somewhere between a third and half the cost of the mixed-oxide process" according to the company's Ernie Kennedy. [n339](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n339) Further, the company is not trying to develop an entirely new reactor design, but just a new fuel element that can be retrofitted into existing conventional nuclear power plants. In fact, Thorium Power expects its technology to be used in a commercial Russian VVER-1000 reactor as early as 2010, and to be "commercially proven" by 2013. [n340](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n340) Thorium Power is hardly a fly-by-night company. It has existed for sixteen years; Hans Blix (former head of the IAEA and UN weapons inspector) is one of its advisors; its executive chairman is Tom Graham (one of the world's leading non-proliferation experts); and the United Arab Emirates has recently appointed it as a consultant. Nor is Thorium Power the only American player in the thorium game. Northamerican Group Corporation has created a new division whose purpose is to develop thorium-based nuclear power generation facilities: The new division would undertake research, and develop both Thorium-based nuclear power generation facilities, and Thorium-based power cells. The company noted that... three top nuclear scientists, who are experts in the use of thorium and uranium in power generating plants, have agreed to join Northamerican's energy group. The scientists would lead the research and development of Thorium-based nuclear reactor... facilities that would help to ease the crunch on natural gas and fossil fuel electric generating facilities. [n341](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n341) In addition, a group of British scientists has "re-discovered" a salt-based thorium reactor design (originally constructed at Oak Ridge, Tennessee, in 1964) and that is now also being revisited by scientists in France, Germany, the Czech Republic, the Netherlands, Norway, Turkey, and Canada. [n342](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n342) This reactor design also has the advantages of being capable of breeding fuel, making hydrogen, and refueling without a reactor shutdown - plus its advocates claim that it is incapable of meltdown. [n343](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n343) India, which has ample thorium reserves, [n344](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n344) is seriously considering the construction of thorium-powered nuclear power [\*329] plants, [n345](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n345) and tentatively plans to build a 300-MW thorium-fueled reactor by 2020. [n346](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n346)

#### Comprehensive international data proves the plan is feasible

Allen, 09 [Leslie Allen is a writer in Washington for the Washington Post, If Nuclear Power Has a More Promising Future ... Seth Grae Wants to Be the One Leading the Charge, http://www.washingtonpost.com/wp-dyn/content/article/2009/07/24/AR2009072401847\_5.html

And what if the technology had already gotten positive reviews from the American Nuclear Society, the World Nuclear Association and, in particular, from the International Atomic Energy Agency (IAEA), the world's nuclear watchdog, which, in a 2005 report titled Thorium Fuel Cycle -- Potential Benefits and Challenges, called it "an attractive way to produce long-term nuclear energy with low radiotoxicity waste?" You'd have the nuclear equivalent of unleaded gas, in Grae's analogy. Glancing around the room with a small smile, Grae is more than ready for skepticism. He's heard it many times over the years while explaining the new nuclear fuel that his company, the Northern Virginia-based Thorium Power Ltd., has been testing in Russia for several years and that he says will be ready to license for commercial use within a decade. One banker says flatly that many investors believe nuclear power, any nuclear power, is an "outdated technology." Grae, 46, who holds both law and business degrees, answers smoothly, occasionally deferring to Thomas Graham Jr., a courtly Kentuckian who is the company's executive chairman of the board and a retired ambassador. During his long State Department career, Graham participated in the negotiation of every major arms control and nonproliferation agreement drawn up over about three decades. (Hans Blix, who was director general of the IAEA and the United Nations' chief weapons inspector for Iraq from 2000 to 2003, is a senior adviser to the company.) By the time Graham excuses himself to attend another meeting, almost every question has been put to rest, it seems, but one: How come no one's heard of this technology?

#### Federal investment key to successful demonstration and licensing

**Wallace ‘5** (President of Constellation Generation Group, Mike Wallace, CQ Congressional Testimony, “NUCLEAR POWER 2010 INITIATIVE,” 4/26, lexis)

The Department of Energy's Nuclear Power 2010 program is a necessary, but not sufficient, step toward new nuclear plant construction. We must address other challenges as well. Our industry is not yet at the point where we can announce specific decisions to build. We are not yet at the point where we can take a $1.5 billion to $2 billion investment decision to our boards of directors. We do yet not have fully certified designs that are competitive, for example. We do not know the licensing process will work as intended: That is why we are working systematically through the ESP and COL processes. We must identify and contain the risks to make sure that nothing untoward occurs after we start building. We cannot make a $1.5 $2 billion investment decision and end up spending twice that because the licensing process failed us. The industry **believes** federal investment is necessary and appropriate to offset some of the risks I've mentioned. We recommend that the federal government's investment include the incentives identified by the Secretary of Energy Advisory Board's Nuclear Energy Task Force in its recent report. That investment stimulus includes: 1. secured loans and loan guarantees; 2. transferable investment tax credits that can be taken as money is expended during construction; 3. transferable production tax credits; 4. accelerated depreciation. This portfolio of incentives is necessary because it's clear that no single financial incentive is appropriate for all companies, because of differences in company-specific business attributes or differences in the marketplace - namely, whether the markets they serve are open to competition or are in a regulated rate structure. The next nuclear plants might be built as unregulated merchant plants, or as regulated rate-base projects. The next nuclear plants could be built by single entities, or by consortia of companies. Business environment and project structure have a major impact on which financial incentives work best. Some companies prefer tax-related incentives. Others expect that construction loans or loan guarantees will enable them to finance the next nuclear plants. It is important to preserve both approaches. We must maintain as much flexibility as possible. It's important to understand why federal investment stimulus and investment protection is necessary and appropriate. Federal investment stimulus is necessary to offset the higher first-time costs associated with the first few nuclear plants built. Federal investment protection is necessary to manage and contain the one type of risk that we cannot manage, and that's the risk of some kind of regulatory failure (including court challenges) that delays construction or commercial operation. The new licensing process codified in the 1992 Energy Policy Act is conceptually sound. It allows for public participation in the process at the time when that participation is most effective - before designs and sites are approved and construction begins. The new process is designed to remove the uncertainties inherent in the Part 50 process that was used to license the nuclear plants operating today. In principle, the new licensing process is intended to reduce the risk of delay in construction and commercial operation and thus the risk of unanticipated cost increases. The goal is to provide certainty before companies begin construction and place significant investment at risk. In practice, **until the process is demonstrated, the industry and the financial community cannot be assured** that licensing will proceed in a disciplined manner, without unfounded intervention and delay. **Only** the successful licensing and commissioning of several new nuclear plants (such as proposed by the NuStart and Dominion-led consortia) can demonstrate that the licensing issues discussed above have been adequately resolved. Industry and investor concern over these potential regulatory impediments may require techniques like the standby default coverage and standby interest coverage contained in S. 887, introduced by Senators Hagel, Craig and others. Let me also be clear on two other important issues: 1. The industry is not seeking a totally risk-free business environment. It is seeking government assistance in containing those risks that are beyond the private sector's control. The goal is to ensure that the level of risk associated with the next nuclear plants built in the U.S. generally approaches what the electric industry would consider normal commercial risks. The industry is fully prepared to accept construction management risks and operational risks that are properly within the private sector's control. 2. The industry's financing challenges apply largely to the first few plants in any series of new nuclear reactors. As capital costs decline to the "nth-of-a-kind" range, as investors gain confidence that the licensing process operates as intended and does not represent a source of unpredictable risk, follow-on plants can be financed more conventionally, without the support necessary for the first few projects. What is needed limited federal investment in a limited number of new plants for a limited period of time to overcome the financial and economic hurdles facing the first few plants built. In summary, we believe the industry and the federal government should work together to finance the first-of-a-kind design and engineering work and to develop an integrated package of financial incentives to stimulate construction of new nuclear power plants. Any such package must address a number of factors, including the licensing/regulatory risks; the investment risks; and the other business issues that make it difficult for companies to undertake capital-intensive projects. Such a cooperative industry/government financing program is a necessary and appropriate investment in U.S. energy security.

#### Tax increases on the wealthy can’t raise enough because state fiscal problems are too deep

**Chandler, 11 –** Wisconsin Policy Research Institute (Richard, Wisconsin's State Budget Outlook: The Worst is Yet to Come, <http://www.wpri.org/Reports/Volume23/Vol23No1/Vol23No1.html>)

The outlook for Wisconsin’s next biennial budget in 2011-13 is sobering. A comparison of plausible revenue and spending projections shows that if state tax revenues grow at a long-term average rate of 3.2% per year, if spending increases at customary rates in just four basic areas where spending has almost always been increased (K-12 school funding, the Medical Assistance program, the University of Wisconsin System and the corrections system), and if spending is frozen for all other programs, the state will face a gap of $2.2 billion between its revenues and its expenditures in the next budget cycle.

It won’t be easy to close this gap. Even if the economy booms and produces robust revenue growth of 5.6% per year, which would match the peak of the last post-recession period, there wouldn’t be enough revenue. Even if all state spending is frozen, including an unprecedented freeze on spending for the basic programs that have received increases even in the toughest budget situations in the past, it wouldn’t completely close the gap. **Tax increases on the wealthy would not come anywhere close to closing the gap**. Major cuts to the operating budgets of all state agencies would not be enough to close the gap

#### Romney’s anti-Russia policy is just rhetoric

LA Times 12 (Maeve Reston and Seema Mehta, “Mitt Romney struggles to differentiate his foreign policy from the president's”, 5/31, http://articles.latimes.com/2012/may/31/nation/la-na-romney-foreign-policy-20120531)

In 2008, Romney called for more collaboration with China and Russia. In a debate four months ago, he put Russian leader Vladimir Putin in the same category — among the "world's worst actors" — as Cuba's Fidel Castro and Iran's Mahmoud Ahmadinejad. He labeled Russia the United States' "No. 1 geopolitical foe," in a March interview on CNN. The latter statement drew widespread scorn as a throwback to Cold War-era politics. Yet Russia represents another instance in which Romney and Obama don't differ much, despite the rhetoric. Romney has assailed Obama as trying to appease the Russians by scrapping a George W. Bush-era plan to build a missile-defense system in Eastern Europe, and replacing it with a different plan to be completed by 2020. Yet Romney says he is willing to commit to the same timeline.

#### Romney win won’t hurt relations

The Economist 9/1 (9/1/12, Romney Could Screw Up US Relations With Russia, <http://www.businessinsider.com/mitt-romneys-foreign-policy-chops-come-into-light-2012-9>, RBatra)

At the same time, the potential impact of a Romney presidency should not be exaggerated. Mr Romney is not an ideological politician, and he will have solid reasons to maintain a working relationship with Russia. These include reliance on Russian transit corridors to support US forces in Afghanistan to 2015 and beyond, Russia's veto in the UN Security Council, and its potential to act as interlocutor between the US and rogue states. Finally, there is a significant element of uncertainty that stems from the lack of clarity about what Mr Romney, who has often changed his position, actually stands for. In particular, the extent of the influence on him of several competing Republican foreign policy schools (neo-conservativism, populist isolationism, realism, liberal internationalism) is unclear.

#### Never gonna give him up, never gonna let him down

Neil Munro 8-30-2011; Daily Caller “Obama still has green energy vote for 2012” <http://dailycaller.com/2011/08/30/obama-still-has-green-energy-vote-for-2012/>

Environmentalists are staging a two-week oil-pipeline protest outside the White House to boost their importance to President Barack Obama’s political calculations in the 2012 election season. But there’s little evidence so far that progressives’ disappointment with Obama’s environmental policies threatens to reduce their turnout on election day, or that it pressures White House officials to make additional concessions to environmentalists during a political season dominated by the public’s demand for additional jobs. Monday’s colorful, TV-ready protests against the Keystone XL pipeline from Canada’s oil fields to U.S consumers took place in Lafayette Park, in front of the White House. The day’s events included 100 peaceful arrests of environmentalists and celebrities, a multi-faith spiritual event in Lafayette Park, press club speeches by environmental leaders, and numerous suggestions that approval of the pipeline by Obama will cost his campaign votes, volunteers and donations. Hundreds of others have already been arrested, and numerous environmental groups have contributed to two weeks of protest. If Obama approves the pipeline, environmental activist Andrew Driscoll predicted he would not vote to re-elect him. “He hasn’t done anything to earn our vote yet,” said the Massachusetts activist. “The fate of humanity, the fate of the planet” will be determined by Obama’s pipeline decision, he said. “If he approves it, it will be a huge blow, not only for our future, but also for this administration,” said Elijah Zarlin, a campaign manager at CREDO Action, an Atlanta-based progressive group. The protesters “are the people who are maybe going to vote for Obama, and are the people Barack will lose” if he approves the pipeline, he added. However, the leadership of the green movement isn’t threatening to break with Obama over this one decision. (RELATED: Gore: Global warming skeptics are this generation’s racists)

#### Energy policy won’t switch votes—it’s all about the economy

AP 12 (Associated Press, “Climate change not a presidential election issue yet”, 8/12, http://www.cbsnews.com/8301-250\_162-57489676/climate-change-not-a-presidential-election-issue-yet/)

Barack Obama promised to tackle climate change when he first ran for the White House four years ago, but - battling this summer for a second term - he speaks little of the issue even as the United States suffers through a drought of historic proportions, wild storms and punishing heat that topples temperature records almost daily. As late as April, Obama told Rolling Stone magazine climate change would be a central campaign issue. "I will be very clear in voicing my belief that we're going to have to take further steps to deal with climate change in a serious way," he said. But as the campaign against Republican challenger Mitt Romney reaches an early boil, even before the parties hold their nominating conventions, climate change is little spoken of by incumbent candidate Obama, who four years ago foresaw millions of new jobs through investments in "renewable sources of energy like solar power, wind power and advanced biofuels." Instead Obama is fighting a Romney challenge in a tight race over the struggling American economy and stubbornly high unemployment. Gallup polling repeatedly shows the economy as the chief concern among American voters at 65 percent, while environmental and pollution issues were mentioned by less than 1 percent of those polled. Even without a big push on climate change, Obama has the support of environmentalists. Sierra Club executive director Michael Brune said Obama "has done a substantial amount in his three years to fight the climate crisis." Romney, he said, "is taking his lead from fossil fuel companies and does not even acknowledge there is a climate problem." Romney has been accused of changing positions on the issue to curry favor with the most conservative Republicans, many of whom deny that climate change exists. As governor of the liberal-leaning state of Massachusetts, Romney imposed restrictions on carbon dioxide emissions on power plants in the state. But as a presidential candidate, he has said the "idea of spending trillions and trillions of dollars to try to reduce CO2 emissions is not the right course for us." He acknowledges that the globe is warming, but says "we don't know what's causing climate change on this planet." Early in his administration, Obama was more bullish on tackling climate change. He pushed through tough new fuel economy standards for cars and trucks and promoted alternative energy. But the first years of Obama's presidency were dominated by the political fight over his plan to overhaul the country's health care system. Obama managed to pass health care over intense Republican objections while Democrats controlled both houses of Congress. But after Republicans - fueled by the conservative tea party movement's anti-government, small-tax message - seized control of the House of Representatives in the 2010 elections, the president's legislative agenda has been blocked. The United States is now more politically riven and gripped in partisanship than at any time in recent history. Legislation on a deeply controversial issue like curbing greenhouse gases stands no chance of passage in Congress at a time when Republicans are accusing Obama of reckless spending and burdening businesses with unnecessary regulations. Obama was bitten badly when Solyndra, a solar energy firm that received a $500 million federal loan guarantee, went bankrupt and left taxpayers with the bill. Republicans painted Obama's drive for alternative energy as a waste of time and money in an economy that was struggling to pull out of the worst downturn since the Great Depression. Obama hasn't totally ignored climate change on the campaign trail. As recently as this week he was promoting a drive to expedite seven solar and wind energy projects in the American West. His interior secretary, Ken Salazar, said Tuesday that the administration had in the past three years "approved more utility-scale renewable energy projects on public lands than in the past two decades combined." But there is little chance that the few undecided American voters who will decide the razor-close election will cast their ballots based on the candidates' position on climate change. James Riddlesperger, a political scientist who studies the juncture of science and politics at Texas Christian University, said the political lines are already drawn. "Everybody already knows where the parties, the candidates stand on global warming," he said. "What is done about it awaits the outcome of this election."

# r3 neg v. kentucky gs

## 1nc

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#### ‘Restrictions’ must be have the primary purpose of directly and immediately affect energy production

CJ Veeraswami (Former Chief Justice of the Madras High Court, India) 1966 “T.M. Kannappa Mudaliar And Ors. vs The State Of Madras” Majority opinion, <http://www.indiankanoon.org/doc/838831/>

The collection of a toll or a tax for the use of a road or for the use of a bridge or for the use of an aerodrome is no barrier or burden or deterrent to traders, who, in their absence, may have to take a longer or less convenient or more expensive route. Such compensatory taxes are no hindrance to anybody's freedom so long as they remain reasonable; but they could of course, be converted into a hindrance to the freedom of trade. If the authorities concerned really wanted to hamper anybody's trade they could easily raise the amount of tax or toll to an amount which would be prohibitive or deterrent or create other impediments which instead of facilitating trade and commerce would hamper them. It is here that the contrast, between 'freedom' (Article 301) and 'restrictions' (Articles 302 and 304) clearly appears; that which in reality facilitates trade and commerce is not a restriction, and that which in reality hampers or burdens trade and commerce is a restriction. It is the reality or substance of the matter that has to be determined. It is not possible apriori to draw a dividing line between that which would really be a charge for a facility provided and that which would really be a deterrent to a trade, but the distinction, if it has to be drawn is real and clear. For the tax to become a prohibited tax it has to be a direct tax the effect of which is to hinder the movement part of trade. So long as a tax remains compensatory or regulatory it cannot operate as a hindrance. 12. Subba Rao, J. as he then was, concurring with Das, J. took substantially the same view and observed (at page 1430);: The word ' freedom ' is not capable of precise definition, but it can be stated what would infringe or detract from the said freedom. Before a particular law can be said to infringe the said freedom, it must be ascertained whether the impugned provision operates as a restriction impeding the free movement of trade or only as a regulation facilitating the same. Restrictions obstruct the freedom, whereas regulations promote it. Police regulations, though they may superficially appear to restrict the freedom of movement, in fact provide the necessary conditions for the free movement. Regulations such as provision for lighting, speed, good condition of vehicles, timings, rule of the road and similar others, really facilitate the freedom of movement rather than retard it. So too, licensing system with compensatory fees would not be restrictions but regulatory provisions;, for without it, the necessary lines of communication such as roads, waterways and airways, cannot effectively be maintained and the freedom declared may in practice turn out to be an empty one....It is for the Court in a given case to decide whether a provision purporting to regulate trade is in fact a restriction on freedom. The further observations as to what was meant by Restrictions in Article 302 are (at page 1433): But the more difficult question is, what does the word " restrictions " mean in Article 302? The dictionary meaning of the word " restrict" is "to confine, bound, limit." Therefore any limitations placed upon the freedom is a restriction on that freedom. But the limitation must be real, direct and immediate, but not fanciful, indirect or remote....Of all the doctrines evolved in my view, the doctrine of ' direct and immediate effect' on the freedom would be a reasonable solvent to the difficult situation that might arise under our Constitution. If a law, whatever may have been its source, directly and immediately affects the free movement of trade, it would be restriction on the said freedom. But a law which may have only indirect and remote repercussions on the said freedom cannot be considered to be a restriction on it. 13. Subba Rao, J., as he then was summed up his views in the following words (at page 1436): The foregoing discussions may be summarised in the following propositions : (1) Article 301 declares a right of free movement of trade without any obstructions by way of barriers, inter-State or intra-State or other impediments operating as such barriers. (2) The said freedom is not impeded, but on the other hand, promoted by regulations creating conditions for the free movement of trade, such as, police regulations, provision for services, maintenance of roads, provision for aerodromes, wharfs, etc. with or without compensation. (3) Parliament may by law impose restrictions on such freedom in the public interest and the said law can be made by virtue of any entry with respect whereof Parliament has power to make a law. (4) The State also, in exercise of its legislative power, may impose similar restrictions, subject to the two conditions laid down in Article 304 (b) and subject to the Proviso mentioned therein. (5) Neither Parliament nor the State Legislature can make a law giving preference to one State over another or making discrimination between one State and another, by virtue of any entry in the Lists, infringing the said freedom. (6) This ban is lifted in the case of Parliament for the purpose of dealing with situations arising out of scarcity of goods in any part of the territory of India and also in the case of a State under Article 304 (h), subject to the conditions mentioned therein. And (7) the State can impose a non-discriminatory tax on goods imported from other States or the Union territory to which similar goods manufactured or produced in the State are subject. 14. It is thus well established that regulatory provisions which do not directly or immediately impede or burden the free movement of trade, commerce and intercourse but provide or intend to provide facilities for trade, commerce and intercourse are not restrictions within the meaning of Part XIII and are compatible with the freedom of trade declared by Article 301. Atiabari Tea Co., Ltd. v. State of Assam , and Automobile Transport Ltd. v. State of Rajasthan , are both cases of imposition of tax. The first was concerned with the Assam Taxation (on Goods carried by Roads or Inland Waterways) Act, 1954,, which was successfully attacked on the ground that it violated Article 301 and was not saved by Article 304 (b). The Act imposed a tax on specified goods transported by road or inland waterways in the State of Assam. The majority in that case held that the Act put a direct restriction on the freedom of trade and, since in doing so, had not complied with the provisions of Article 304 (b), it must be declared to be void. In the second case the Rajasthan Motor Vehicles Taxation Act, 1951, was impugned as violating Article 301. But the majority did not accept the contention on the view that the Act was merely a regulatory measure imposing compensatory taxes for the use of trading facilities. The scope of Article 301 was again in the light of the earlier decisions referred to in Khyerbari Tea Co. v. State of Assam , where the Assam Taxation (On goods carried by Roads or Inland Waterways) Act as amended after Atiabari Tea Co. Ltd. v. State of Assam , was attacked on various grounds but without success. 15. As already seen, the distinction between a restriction and a regulation is fine but real, though the dividing line is not capable in the nature of things of a comprehensive and satisfactory definition. The test, broadly speaking, is whether the impugned provisions lay a direct and immediate burden on the movement of trade, commerce and intercourse or are intrinsically beneficial to and provide, in the ultimate analysis, facilities for better conduct of trade, commerce and intercourse. Observed Das, J., in Automobile Transport Ltd. v. State of Rajasthan

#### Exon-Florio reviews are explicitly REGULATIONS not RESTRICTIONS intended to merely MONITOR and SUPERVISE high profile transactions involving the ownership of companies – production related energy activities are excluded

CJ Voss (Attorney at Stoel Rives LLP) September 24, 2012 “Energy Law Alert: CFIUS Intervenes in Chinese-Owned Wind Project” http://www.stoel.com/showalert.aspx?Show=9813

Brief History of CFIUS

President Ford created CFIUS by Executive Order 11858 in 1975, in response to an influx of investment from the Middle East, to monitor the impact of and coordinate U.S. policy on foreign investment in the United States. In 1988, in response to concerns over the acquisition of Fairchild Semiconductor International, Inc., by Fujitsu Limited, Congress passed the Exon-Florio Amendments to the Defense Production Act of 1950 ("Exon-Florio") granting the President the express authority to block proposed mergers, acquisitions, and takeovers that threaten national security. Exon-Florio was subsequently amended by the Foreign Investment and National Security Act of 2007 ("FINSA"). Scope of Review Under Exon-Florio Exon-Florio applies to "covered transactions", which include mergers, acquisitions, and takeovers involving "foreign persons" that could result in foreign control of U.S. businesses, transfers of ownership of a U.S. business from one foreign owner to another, and transactions that result in foreign ownership of a part of an entity or of assets constituting a U.S. business (such as a division). The regulations implementing FINSA identify certain types of transactions, including leases, start-up or "greenfield" investments, and lending transactions that are not considered covered transactions. However, the regulations provide that long-term leases and lending transactions may be considered covered transactions if the foreign lessee or lender makes significant business decisions, characteristic of an owner. In addition, start-up or "greenfield", investment is narrowly construed to mean investment involving such activities as "separately arranging for the financing of and the construction of a plant to make a new product, buying supplies and inputs, hiring personnel, and purchasing the necessary technology." Further, a start-up investment "may involve the acquisition of shares in a newly incorporated subsidiary." Accordingly, in most cases, these exceptions are unlikely to benefit foreign investors in U.S. renewable energy projects. Under Exon-Florio, the President is authorized to suspend or prohibit any covered transaction if there is credible evidence that the foreign person exercising control might take action that threatens to impair U.S. national security. The term "national security" is not defined in the statute or implementing regulations and is construed broadly by CFIUS to include all facts and circumstances that have potential national security implications. Factors that will heighten CFIUS's interest in a transaction include whether the acquisition target: has contracts with the U.S. government, particularly sole- or single-source defense contracts, classified contracts or contracts with U.S. government agencies that have national security responsibilities (e.g., homeland security, intelligence); possesses sensitive or classified technologies, particularly with defense or law enforcement applications, or produces goods, services, or technologies subject to export controls; controls "critical infrastructure," including major energy assets; or is engaged in operations that involve nuclear energy. In addition, the prospective purchaser's nationality and whether it is controlled or owned (in whole or in part) by a foreign government are important factors in determining whether a CFIUS review may be appropriate. In light of these factors, national security concerns may arise in a number of ways when a foreign entity acquires a U.S. renewable energy business: If the U.S. business holds sensitive, classified, or export controlled information or technology, or provides power or energy-related products directly to a U.S. government agency, CFIUS approval should be sought. Transactions involving foreign control over "major energy assets" are subject to heightened scrutiny. A transaction involving "major energy assets" is subject to a mandatory 45-day investigation unless CFIUS concludes during its initial review that the acquisition will not impair national security. To the extent that a renewable energy project is integrated into traditional energy transmission and distribution networks, the possibility that a foreign owner of the project could materially disrupt an energy supply chain likely would raise national security concerns. The nationality of the acquirer likely influences the CFIUS process. Transactions involving acquirers based in China, Russia, certain countries in the Middle East, and other countries perceived as "non-cooperative" with respect to national security-related matters likely will be subject to greater scrutiny than transactions involving acquirers based in the E.U. or other G20 nations.

#### That’s a voter:

#### A) Limits – there are an infinite number of indirect limitations on company’s ability to produce energy – simply measuring its end effect explodes the literature base. Raises entry barriers for debate and destroy competitive equity.

#### B) Precision - Broadly defining ‘restriction’ is bad – obliterates subtleties in meaning, undermines all legal and policy analysis under the topic

Eric Heinze (Senior Lecturer in Law, University of London, Queen Mary. He has held fellowships from the Fulbright Foundation and the French and German governments. He teaches Legal Theory, Constitutional Law, Human Rights and Public International Law. JD Harvard) 2003 “The Logic of Liberal Rights A study in the formal analysis of legal discourse” http://mey.homelinux.org/companions/Eric%20Heinze/The%20Logic%20of%20Liberal%20Rights\_%20A%20Study%20in%20%20%28839%29/The%20Logic%20of%20Liberal%20Rights\_%20A%20Study%20in%20%20-%20Eric%20Heinze.pdf

Variety of ‘restrictions’

The term ‘restriction’, defined so broadly, embraces any number of familiar concepts: ‘deprivation’, ‘denial’, ‘encroachment’, ‘incursion’, ‘infringement’, ‘interference’, ‘limitation’, ‘regulation’. Those terms commonly comport differences in meaning or nuance, and are not all interchangeable in standard legal usage. For example, a ‘deprivation’ may be distinguished from a ‘limitation’ or ‘regulation’ in order to denote a full denial of a right (e.g. where private property is wholly appropriated by the state 16 Agents without compensation) as opposed to a partial constraint (e.g. where discrete restrictions are imposed on the use of property which nonetheless remains profitably usable). Similarly, distinctions between acts and omissions can leave the blanket term ‘restriction’ sounding inapposite when applied to an omission: if a state is accused of not doing enough to give effect to a right, we would not colloquially refer to such inaction as a ‘restriction’. Moreover, in a case of extreme abuse, such as extrajudicial killing or torture, it might sound banal to speak merely of a ‘restriction’ on the corresponding right. However, the term ‘restriction’ will be used to include all of those circumstances, in so far as they all comport a purpose or effect of extinguishing or diminishing the right-seeker’s enjoyment of an asserted right. (The only significant distinction which will be drawn will be between that concept of ‘restriction’ and the concept of ‘breach’ or ‘violation’. The terms ‘breach’ or ‘violation’ will be used to denote a judicial determination about the legality of the restriction.6) Such an axiom may seem unwelcome, in so far as it obliterates subtleties which one would have thought to be useful in law. It must be stressed that we are seeking to eliminate that variety of terms not for all purposes, but only for the very narrow purposes of a formal model, for which any distinctions among them are irrelevant.

### 1nc elections

#### Obama will win but it will be close

**Blumenthal, 10/1/12** - senior polling editor of the Huffington Post and the founding editor of Pollster.com (Mark, New 2012 Polls Show Little Change In State Of Race, http://www.huffingtonpost.com/2012/10/01/2012-polls-obama-romney\_n\_1928472.html?utm\_hp\_ref=elections-2012)

WASHINGTON -- With attention turning to the first of three upcoming national debates, new polls show President Barack Obama continuing to hold a narrow lead over Republican nominee Mitt Romney, both nationwide and in the key battleground states that are likely to decide the election. Two new national surveys released on Monday morning both show a slightly closer race than most other recent polls, although those new results are consistent with previous surveys from the same organizations, indicating that Obama's September lead is holding. The new Washington Post/ABC News survey finds Obama leading by just 2 percentage points nationwide (49 percent to 47 percent) among the voters deemed most likely to vote. But that result was no different than their previous survey, taken just after the Democratic convention three weeks ago, which showed Obama with a 1-point edge (49 percent to 48 percent). However, among all registered voters nationwide, the new Post/ABC poll shows Obama leading by 5 percentage points (49 percent to 44 percent), again the same margin as their survey found three weeks ago. The Post also reports that Obama's lead over Romney is larger (52 percent to 41 percent) among a subset of likely voters **in swing states**. Similarly, a new Politico/George Washington University Battleground poll also finds Obama leading by 2 percentage points among likely voters (49 percent to 47 percent), a finding essentially unchanged from the 3-point Obama margin (50 percent to 47 percent) found in their previous survey. The four results have been collectively more favorable to Romney than those produced by other recent national polls, and more importantly, they have shown no statistically meaningful trend in September. The HuffPost Pollster tracking model, which draws on all national and state-level polling and corrects for consistent "house effect" differences among pollsters, continues to give Obama a slightly larger, 4 percentage point lead over Romney. Similarly, a handful of new statewide surveys released over the weekend shows results consistent with a 3- to 4-point Obama lead nationwide. In Iowa, a new Des Moines Register Iowa poll found Obama leading by 4 percentage points (49 percent to 45 percent), exactly the same margin as the Pollster tracking model. In Ohio, an automated recorded-voice survey by the Democratic-affiliated firm Public Policy Polling gives Obama a 4 percentage point advantage, while a new Columbus Dispatch mail-in survey gives Obama a 9-point lead. Not surprisingly, Obama's lead on the Pollster tracking model falls somewhere in between. Finally, another new PPP poll from North Carolina shows a dead-even race, with each candidate at 48 percent -- again, consistent with a similarly close margin on HuffPost's tracking model. North Carolina has been the closest of the 50 states over the last three weeks. Thus, the combination of national and statewide polling continues to show Obama leading Romney by statistically meaningful margins in all of the battleground states except North Carolina. Were he to carry all of the states where he is currently leading, Obama would win 332 electoral votes -- far more than the 270 needed to win. Romney currently leads in states accounting for 191 electoral votes. Can Wednesday night's nationally televised debates between Obama and Romney, the first of three to be held between now and late October, be a "game changer" for Romney? Not likely, according to George Washington University political scientist John Sides. "When it comes to shifting enough votes to decide the outcome of the election," Sides writes in the Washington Monthly, "presidential debates have rarely, if ever, mattered." Sides cites research by political scientists Robert Erikson and Christopher Wlezien, who studied polling from every election from 1952 to 2008 and found that while debates sometimes nudge results, they rarely produce substantial changes in voter preferences. Erikson and Wlezien found that since 1960, the leader in the polling before the debates remained the leader after the debates. The most significant before-and-after debate shift was toward Gerald Ford in his 1976 race against Jimmy Carter. However, as Erikson and Wlezien note, "Carter's support was in steady decline" during the final month of the race. It is worth remembering that while Obama enjoys a statistically meaningful lead in national polling, his margin remains relatively modest compared to past elections. So while a "nudge" toward Romney on the order of what debates produced in 1980, 2000 or 2004 might not be enough to move Romney ahead, it could make for a much closer race.

#### The plan makes China a pivotal election issue – China bashing gave the GOP the advantage in the midterms

**Yingzi, 10** (Tan, “US likely to give nod to CNOOC deal, despite opposition” 10/14, China Daily,

<http://www.chinadaily.com.cn/bizchina/2010-10/14/content_11409139.htm>

Several proposed Chinese investment projects in the US have encountered political obstacles this year. Some Congress members blamed China for the high US unemployment rate and regard the emerging economy's global expansion as a national security threat.

China has appeared as a "scapegoat" for the wobbly US economy in the fierce campaign for November's midterm elections. At least 29 candidates have aired advertisements blaming their opponents for being too sympathetic to China, the New York Times reported on Saturday.

Strong political opposition to the CNOOC deal is likely, given the recent congressional objections to Anshan Iron and Steel Group's investment in a small US steel company, said Scissors from the Heritage Foundation.

#### Romney will ignite China trade wars

Mike Shedlock, 7-31-2012; registered investment advisor representative for SitkaPacific Capital Management, “Is global trade about to collapse? Where are oil prices headed? A chat with Mish Shedlock by James Stafford” http://energybulletin.net/stories/2012-07-31/global-trade-about-collapse-where-are-oil-prices-headed-chat-mish-shedlock

Oilprice.com: In regards to presidential elections, how do you think energy will fare under Obama and under Romney? Which sectors will benefit, and which will suffer? Mish: Mitt Romney has declared that if he’s elected he is going to label China a currency manipulator and increase tariffs on China across the board. That's something that I believe he might be able to do by mandate. If he's elected and he does follow through, I think the result will be a global trade war the likes of which we have not seen since the infamous Smoot-Hawley Tariff Act compounded problems during the Great Depression. Simply put, I think that global trade will collapse if Romney wins and he follows through on his campaign promises.

#### Crushes Russia relations

The **Christian Science Monitor, 10-26-11**, p. <http://www.alaskadispatch.com/article/putin-and-russian-empire-can-us-russian-relations-survive?page=0,1>

Russia's foreign policy community is watching with growing nervousness as leading Republicans in the US, including at least one top contender for the party's presidential nomination, turn their ire against Barack Obama's already troubled "reset" in US-Russian relations, which the Kremlin sees as vital to its future plans for repairing Russian influence in the world.

Republicans have been critical all along of Mr. Obama's policy of building strong, practical relations with Moscow while soft-peddling US disapproval of Kremlin power abuses and human rights violations. But as recently as last December, more than a dozen Republican senators joined Democrats to win the needed two-thirds Senate ratification of the START nuclear arms reduction accord, which was understood in Moscow as a sign that pragmatism would always prevail in Washington.

Now, Russian experts do not seem so sure.

Since former president Vladimir Putin decided to shoulder aside his hand-picked successor, Dmitry Medvedev, and seek a fresh term as Russia's supreme leader, the tone of discussion about Russia in the US has grown much harsher, many note.

Mr. Putin's recently publicized plan to establish a "Eurasian Union" – a strong economic, and potentially political, alliance of former Soviet states – has rekindled fears among many in the West that Russia's strategic goal is to bring back the USSR and return to its historic rivalry with the US.

"We had hoped that the reset with the US might help Russia move into a friendlier, closer relationship with the West, but that seems to be fading fast," says Viktor Kremeniuk, deputy director of the official Institute of USA-Canada Studies in Moscow. "Now it seems the general opinion in the US is that Russia is fast becoming an authoritarian state with the scarecrow figure of Putin as its next president. It's all starting to feel a bit hopeless."

In a Washington Post interview earlier this month, Republican presidential contender Mitt Romney, often seen as moderate, is quoted as saying that Putin "dreams of rebuilding the Russian empire." Obama's reset of relations "has to end ... we have to show strength," Mr. Romney added.

Reining in Russian ambitions?

At a Washington conference Tuesday, Republican House Speaker John Boehner slammed Russia's "use of old tools and old thinking" as an attempt "to restore Soviet-style power and influence," and called for tougher measures to rein in Russian ambitions. At the same meeting, Garry Kasparov, a leader of the banned Other Russia opposition movement, urged Americans to heed Ronald Reagan's advice and treat Putin's Russia as an "evil empire" beyond the pale of civilized nations.

The current cold war-style spat between Moscow and Washington over the suspicious death of Sergei Magnitsky, an anticorruption lawyer who died after being denied medical treatment in a Russian remand prison two years ago, clearly illustrates the reasons Moscow prefers Obama to any Republican who might come into the White House.

A bill currently before the US Senate, the Sergei Magnitsky Rule of Law Accountability Act of 2011, and heavily supported by Republicans, would impose tough visa restrictions and financial penalties on a list of Russian officials deemed to be implicated in his fate.

But the US State Department has moved to preempt the bill by issuing its own "secret" list of proscribed officials, without imposing any financial sanctions, and connecting it with global human rights policies rather than a measure specifically targeted at Russia. Last weekend Moscow announced its own list of US citizens allegedly implicated in human rights abuses, who would be denied entry to Russia.

"On the surface it looks like a bad dispute, but actually we see the actions of the Obama administration as proof that it is committed to the reset," says Dmitry Suslov, an expert with the Council on Foreign and Defense Policies, an influential Moscow think tank. "The Senate bill is purely anti-Russian, and for the time being at least, Obama has managed to blunt this. It's greatly appreciated in Moscow.... We know that if any of the current Republican presidential nominees makes it to the White House, things will go very badly for the US-Russian relationship."

#### Extinction

**Collins & Rojansky, 10** – \* U.S. Ambassador to the Russian Federation from 1997 to 2001, AND \*\*deputy director of the Russia and Eurasia Program at the Carnegie Endowment (8/18/10, James F. Collins, Matthew Rojansky, Foreign Policy, “Why Russia Matters,” http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=41409, JMP)

A year and a half after Barack Obama hit the "reset" button with Russia, the **reconciliation is still fragile, incomplete, and politically divisive**. Sure, Russia is no easy ally for the United States. Authoritarian yet insecure, economically mighty yet technologically backward, the country has proven a challenge for U.S. presidents since the end of the Cold War. Recent news hasn't helped: The arrest in July of a former deputy prime minister and leader of the Solidarity opposition movement, Boris Nemtsov, provoked some of the harshest criticism of Russia yet from the Obama administration. Then last Wednesday, Russia announced that it had moved anti-aircraft missiles into Abkhazia, the region that broke off from Georgia during the August 2008 war. The announcement was hardly welcome news for the United States, which has tried to defuse tensions there for the last 24 months.

Yet however challenging this partnership may be, Washington can't afford not to work with Moscow. Ronald Reagan popularized the phrase, "Trust, but verify" -- a good guiding principle for Cold War arms negotiators, and still apt for today. Engagement is the only way forward. Here are 10 reasons why:

1. **Russia's nukes are still an existential threat.**

Twenty years after the fall of the Berlin Wall, Russia has thousands of nuclear weapons in stockpile and hundreds still on hair-trigger alert aimed at U.S. cities. This threat will not go away on its own; cutting down the arsenal will require direct, bilateral arms control talks between Russia and the United States. New START, the strategic nuclear weapons treaty now up for debate in the Senate, is the latest in a long line of bilateral arms control agreements between the countries dating back to the height of the Cold War. To this day, it remains the only mechanism granting U.S. inspectors access to secret Russian nuclear sites. The original START agreement was essential for reining in the runaway Cold War nuclear buildup, and New START promises to cut deployed strategic arsenals by a further 30 percent from a current limit of 2,200 to 1,550 on each side. Even more, President Obama and his Russian counterpart, Dmitry Medvedev, have agreed to a long-term goal of eliminating nuclear weapons entirely. But they can only do that by working together.

2. **Russia is a swing vote on the international stage.**

As one of the five permanent members of the U.N. Security Council, Moscow holds veto power over any resolution that the body might seek to pass -- including recent efforts to levy tougher sanctions on Iran or, in 2009, against North Korea following that country's second nuclear test. Russian support for such resolutions can also help persuade China and others not to block them. The post-reset relationship between Moscow and Washington works like a force multiplier for U.S. diplomacy. Russia plays an equally crucial role in the G-8 and G-20 economic groups, helping to formulate a coordinated approach in response to economic threats. In 2008, for example, Russia supported a G-20 resolution promising to refrain from protectionism and avoid new barriers to investment or trade.

3. Russia is big.

The country's borders span across Europe, Central and East Asia, and the Arctic -- all regions where the United States has important interests and where it cannot afford destructive competition. With an ongoing counterinsurgency campaign in Afghanistan, the United States has a strong interest in Central Asian stability and relies on Russia not only for direct assistance with logistics and information sharing, but to help manage threats like the recent political upheaval and sectarian violence in Kyrgyzstan. In the former Soviet space, Moscow's historical ties to newly independent states are still fresh and powerful. Moscow is the linchpin to resolving "frozen conflicts" that prevent countries like Moldova, Georgia, and Azerbaijan from prospering economically and moving toward European Union membership. Recently, for example, Moscow signaled renewed interest in resolving frozen conflicts in Nagorno-Karabakh and Transnistria. And despite recent troop movements into Abkhazia, a negotiated settlement is still very possible, one that returns some territory to Georgia but preserves its autonomous status, along with that of its fellow breakaway republic, South Ossetia.

4. Russia's environment matters.

As the catastrophic fires across Western Russia have dramatically illustrated, Russia is both a victim of global climate change and a steward of natural resources -- including many of the forests now badly burned -- **needed to reverse the global warming trend.** With more than one-tenth of the world's total landmass, vast freshwater and ocean resources, plus deposits of nearly every element on the periodic table, Russia is an indispensable partner in the responsible stewardship of the global environment. On climate change, there is work to be done, but progress is evident. Russia today is the world's fourth-largest carbon emitter, but as a signatory to the Copenhagen Accord, it has pledged to reduce emissions to 20 to 25 percent below 1990 levels. Another black spot is Russia's use of "flaring" -- a technique that burns natural gas into the open atmosphere during oil extraction, but Medvedev agreed to capture 95 percent of the gas currently released through flaring. Last year he also signed Russia's first law on energy efficiency, which takes such steps as requiring goods to be marked according to their energy efficiency and banning incandescent light bulbs after 2014. True, most of Russia's other commitments are short on deadlines and concrete deliverables. But like China's cleanup for the Beijing Olympics, Moscow could transform resolve into reality with surprising speed, given the right amount of international engagement. And in the meantime, Russia's natural climate-cleaning properties are vast; the Siberian provinces alone contain more clean oxygen-producing forests and reserves of freshwater than continental Europe.

5. Russia is rich.

As the "R" in the famous BRIC grouping of emerging economies, Russia is the 12th-largest market in world, with the third-largest foreign currency reserves. And the country's role in world markets is only growing. Russia is a big player in commodity trading, the country boasts a volatile but increasingly attractive stock exchange, and it is open to foreign investment -- even in state-owned industries. Russian businesses are increasingly looking abroad to form strategic partnerships, acquire assets, and sell their products. And as a country that felt the global financial crisis viscerally -- economic growth fell by almost 8 percent in 2009 -- Russia has a strong interest in making sure there is no repeat. Despite occasional retrenchments, such as the ban on grain exports after the summer fires, Russia is committed to becoming a free-trading World Trade Organization member, and wants more access to U.S. and European technology and management know-how to drive its modernization. Excessive bureaucracy and widespread corruption are the biggest challenges to Russia's further economic growth, but these are already top talking points in Medvedev's modernization drive, and engagement with more transparent Western countries such as the United States can only help.

6. One word: energy.

The American way of life depends on stable and predictable commodity prices -- gasoline, natural gas, and coal in particular -- and Russia plays a large role in the global production and pricing of these fossil fuels. Russia alone possesses roughly one-quarter of the world's known gas reserves, and it is currently responsible for over a fifth of global exports. It is the second largest oil-producing state after Saudi Arabia and has the second-largest coal reserves after the United States. The even better news for Washington is that Russia is not a member of OPEC, the cartel of oil-producing countries. This gives the country far more freedom to focus on increasing exports rather than reducing them to keep prices down. When it comes to bringing supply to market, many will no doubt remember the so-called gas wars between Russia and Ukraine and Russia and Belarus that left Eastern Europe in the cold several times in recent years. Much of the trouble is attributable to the legacy of Soviet energy infrastructure in Russia's western neighbors, which put a choke-hold on Russia's gas pipelines. Moscow is currently working with the United States, China, and Western Europe to find a way around this problem, which will entail building new pipelines through the Baltic Sea, Black Sea and Siberia.

7. **Russia is a staunch ally in the war on terror** (and other scourges).

Even during the dark days after the 2008 Russia-Georgia war, Moscow and Washington cooperated effectively on counterterrorism, counternarcotics, infectious disease prevention and response, and other shared security priorities. Recently, the two have worked together under the auspices of the Bilateral Presidential Commission to coordinate relief strategies for catastrophes such as the Haiti earthquake and the violence in Kyrgyzstan. Both Washington and Moscow recognize that swift, well-organized responses to such crises are key to preventing weaknesses from being exploited -- for example by extremist groups who are happy to fill the vacuum of government authority. Russia is also a critical partner in U.S. law enforcement efforts to defeat organized crime and terrorism financing. The two countries are currently working to map smuggling routes in Central Asia. And Russia has shared information with the United States on the informal financial networks used to fund Taliban and Afghan warlords.

8. The roads to Tehran and Pyongyang go through Moscow.

Russia maintains unique relationships with Iran and North Korea -- both top concerns on Washington's nuclear nonproliferation radar. In the past, the Kremlin has used its leverage to keep the path open for negotiations, sending senior diplomats to Tehran and offering carrots such as civilian nuclear assistance and weapons sales (though it has deferred the sale of advanced S-300 ground-to-air missiles that could be used to blunt a U.S. or Israeli air strike). Now more than ever, Washington needs allies with that kind of leverage to help punish violators and **discourage cascading nuclear proliferation worldwide.** Leading by example on nonproliferation is also a must; as the world's biggest nuclear powers, the United States and Russia are looked to as the standard-setters. If they fail to ratify their latest modest step forward on bilateral nuclear arms control, it will be difficult to push other countries to take similar counter-proliferation measures.

9. **Russia can be a peacemaker.**

Moscow has the potential to play a role in the settlement of key regional conflicts -- or if it chooses, to obstruct progress. Russia is a member of the Middle East "Quartet," the six-party talks dealing with North Korean denuclearization, and each of the working groups addressing conflicts in the post-Soviet space, such as the OSCE Minsk group on Nagorno-Karabakh, and the 5+2 group on Transnistria. In such post-Soviet regions in particular, Russia has a unique capacity to contribute to peaceful resolution of territorial disputes by facilitating trade and economic engagement with and between former adversaries, and acting as a peacekeeper once a final settlement is reached. In the Middle East, Russia still controls a network of commercial and intelligence assets and has substantial influence with the Syrians, who should be pushed to play a more productive role in the Arab-Israeli peace process.

10. Russians buy U.S. goods.

As the U.S. economy stops and starts its way out of recession, most everyone agrees that boosting exports is a key component in the recovery. And Russia is a big market. U.S. companies such as Boeing, International Paper, and John Deere have invested billions in Russian subsidiaries and joint ventures. In all, there are more than 1,000 U.S. companies doing business there today. They are in Russia not only to take advantage of the country's vast natural resources and highly skilled workers but also to meet the demand for American-branded goods. The Russian middle class wants consumer goods and the country's firms increasingly seek advanced U.S. equipment and machinery. Between 2004 and 2008, before the financial crisis hit, U.S.-Russia trade grew by more than 100 percent to over $36 billion annually, and although that figure dropped by a third in 2009, there is potential for an even better, more balanced trade relationship in the coming decade.

In short, **Russia is indispensible**. As long as the United States participates in the global economy and has interests beyond its own borders, it will have no choice but to maintain relations with Russia. And good relations would be even better.

### 1nc courts (1)

#### The United States Supreme Court should rule crude oil and natural gas production from Exon-Florio reviews unenforceable by federal agencies.

#### Courts have authority to rule over energy production

Brenda Bowers April 2011 “Future Of American Energy Production At Stake In US Supreme Court – Big Government” http://brendabowers.wordpress.com/2011/04/19/%C2%BB-future-of-american-energy-production-at-stake-in-us-supreme-court-big-government/

We all know how important energy is in our lives, just as commercial energy is critical to free market capitalism and the pursuit of prosperity in America. Now, thanks to environmental activists and several states, that may all be at risk in the US Supreme Court. In 2004, unhappy that the duly elected Bush administration wasn’t restricting carbon emissions in the alleged cause of global warming, environmental activism prompted several states to file a “public nuisance” lawsuit, which would empower the courts in this regard. They lost in the lower court but that was reversed in 2007. This case is novel, and far more aggressive and disruptive than the global warming case the Court previously permitted. In a 2007 decision, Massachusetts v. EPA, a closely divided Court agreed with 12 states and several cities that the Environmental Protection Agency has authority to regulate carbon dioxide as a pollutant under the Clean Air Act. Though that case dealt with a narrow claim to enforce a federal statute, the Court’s decision emboldened what had already become a cottage industry of lawsuits designed to slow global warming by asking federal courts to enact what interest groups have been unable to secure through the democratic process: carbon caps and other limits on the way energy is produced in this country. Under the guise of “public nuisance,” the plaintiffs in these suits seek to impose enormous damages and binding emissions caps on energy companies. The plaintiffs have acknowledged that their goal is a veritable sea change in the way energy is produced, sold, and used in this country. Incredibly, they assert that these companies can make major changes to lower emissions – such as the adoption of wind and solar alternatives – “without significantly increasing the cost of electricity.” But never before has the “public nuisance” doctrine been used to set national economic and energy policy. While litigation may be therapeutic for those frustrated by political inaction, this case is at odds with this country’s legal tradition. Meanwhile, a recently elected Republican House is taking steps to go in the other direction through budget cuts to the EPA. Environmental activism in the US is, in effect, looking to up-end the democratic process – an all too common theme across the Left – by empowering the courts to make policy in perhaps the single most critical policy area for American prosperity.

#### This solves and competes – it doesn’t ‘reduce’ a legal restriction – it just makes it unenforceable

William Treanor (associate professor of law at Fordham University) and Gene Sperling (Deputy assistant to the president for economic policy University of Minnesota) 1993 “Prospective overruling and the revival of Unconstitutional statutes” JSTOR

Unlike the Supreme Court, several state courts have explicitly addressed the revival issue. The relevant state court cases have concerned the specific issue of whether a statute that has been held unconstitutional is revived when the invalidating decision is over- turned.42 With one exception, they have concluded that such statutes are immediately enforceable. The most noted instance in which the revival issue was resolved by a court involved the District of Columbia minimum wage statute pro- nounced unconstitutional in Adkins. After the Court reversed Adkins in West Coast Hotel, President Roosevelt asked Attorney General HomerCummings for an opinion on the status of the District of Columbia's statute. The Attorney General responded, The decisions are practically in accord in holding that the courts have no power to repeal or abolish a statute, and that notwithstanding a decision holding it unconstitutional a statute continues to remain on the statute books; and that if a stat- ute be declared unconstitutional and the decision so declaring it be subsequently overruled the statute will then be held valid from the date it became effective.43 Enforcement of the statute followed without congressional action.44 When this enforcement was challenged, the Municipal Court of Appeals for the District of Columbia inJawish v. Morlet 45 held that the decision in West Coast Hotel had had the effect of making the statute enforceable. The court observed that previous opinions addressing the revival issue proceed on the principle that a statute declared unconstitutional is void in the sense that it is inoperative or unenforceable, but not void in the sense that it is repealed or abolished; that so long as the decision stands the statute is dormant but not dead; and that if the decision is reversed the statute is valid from its first effective date.46 The court declared this precedent sound since the cases were "in ac- cord with the principle 'that a decision of a court of appellate jurisdic- tion overruling a former decision is retrospective in its operation, and the effect is not that the former decision is bad law but that it never was the law.' "47 Adkins was thus, and had always been, a nullity. The court acknowledged that, after Adkins, it had been thought that the District of Columbia's minimum wage statute was unconstitutional. As the court put it, "'[J]ust about everybody was fooled.' "48 Nonetheless, the court's view was that since the minimum wage law had always been valid, although for a period judicially unenforceable, there was no need to reenact it.49 Almost all other courts that have addressed the issue of whether a statute that has been found unconstitutional can be revived have reached the same result as theJawish court, using a similar formalisticanalysis.50 The sole decision in which a court adopted the nonrevival position is Jefferson v. Jeferson,51 a poorly reasoned decision of the Louisiana Supreme Court. The plaintiff in Jeferson sought child sup- port and maintenance from her husband. She prevailed at the trial level; he filed his notice of appeal one day after the end of the filing period established by the Louisiana Uniform Rules of the Court of Ap- peals. The Court of Appeals rejected his appeal as untimely, even though the Louisiana Supreme Court had previously found that the ap- plicable section of the Uniform Rules violated the state constitution. One of Ms. Jefferson's arguments before the state Supreme Court was that that court's previous ruling had been erroneous and that the rules should therefore be revived. In rejecting this claim and in finding for the husband, the Court stated: Since we have declared the uniform court rule partially unconstitutional, it appears to be somewhat dubious that we have the right to reconsider this ruling in the instant case as counsel for the respondent judges urges us to do. For a rule of court, like a statute, has the force and effect of law and, when a law is stricken as void, it no longer has existence as law; the law cannot be resurrected thereafter by a judicial de- cree changing the final judgment of unconstitutionality to con- stitutionality as this would constitute a reenactment of the law by the Court-an assumption of legislative power not dele- gated to it by the Constitution.52 The Louisiana Court thus took a mechanical approach to the revival question. According to its rationale, when a statute is found unconstitutional, it is judicially determined never to have existed. Revival there- fore entails judicial legislation and thereby violates constitutionally mandated separation of powers: because the initial legislative passage of the bill has no legitimacy, the bill's force is considered to be purely a creature of judicial decision-making. Jefferson has little analytic appeal. Its view of the separation of pow- ers doctrine is too simplistic. Contrary to the Jeferson rationale, a "re- vived" law is not the pure product of judicial decision-making. It is, instead, a law that once gained the support of a legislature and that has never been legislatively repealed. Its legitimacy rests on its initial legis- lative authorization. Moreover, the view that a statute that has been found unconstitutional should be treated as if it never existed may have had some support in the early case law, but it has been clearly rejected by the Supreme Court. Instead of treating all statutes that it has found unconstitutional as if they had never existed, the Court has recognized a range of circumstances in which people who rely on an overturned decision are protected. Indeed, as will be developed, the doctrine of prospective overruling evolved to shield from harm those who relied on subsequently overruled judicial decisions.53 In short, the one case in which there was a holding that a statute did not revive does not offer a convincing rationale for nonrevival.

#### Not specifying your agent is a voting issue:

#### 1. Ground – we lose agent counterplans politics links and case turns

#### 2. Aff conditionality ---they can shift their advocacy destroying competitive equity and negative strategic thinking.

#### 3. Topicality – the plan is not a definite course of action because it’s unclear who implements it – resolved means “to make a firm decision” – that’s American Heritage. Vote neg on jurisdiction.

#### 4. No Solvency – Vote on presumption because there is no actor USFG --- the plan can’t get done

### 1nc solvency

Plan doesn’t solve – Carroll says you have to redefine “national security” in the review process – arbitrarily waiving the requirement for part of one sector doesn’t change CFIUS policy or foreign perception of American FDI protectionism

#### Massive alt cause – CFIUS wind energy suit

Shierman, 9/20**/**12 (Eric, “Fed foreign investment review committee abusing its power?” Oregon Catalyst, <http://oregoncatalyst.com/19321-fed-foreign-investment-review-committee-abusing-power.html>)

A **terribly counterproductive** and arbitrarily political ruling of the Obama administration to shut down the development of a startup Oregon energy company presents a remarkable abuse of power that has so far gone completely unreported here locally. Ironically, I’m not referring to a coal company either. Obama is shutting down a wind energy company.¶ Ralls Corporation, named after the Texan town it originates from, has purchased four small Oregon startup wind farms that were unable to tap into the green energy gravy train. These Oregon startups had acquired wind farm development rights, power distribution agreements, and all the required regulatory approval, but they lacked the capital to purchase the wind turbines.¶ Ralls intends to risk its own capital building this business here in Oregon to develop the capacity to produce and sell 40 megawatts in our state’s electricity market. So what’s not to love? I have been critical of wind energy projects that risk public money, but if a firm wants to have at it on its own dime I say best of luck to them. So why were they shut down by Mr. “all the above” energy strategy? Could it be that Ralls will be competing with subsidized firms in Obama’s patronage support network? Could it be that Ralls will not be purchasing GE turbines?¶ We don’t know. The Obama administration refuses to say. The Committee on Foreign Investment in the United States (CFIUS) has simply vetoed the project, declaring this investment in the Oregon economy a threat to national security. Made up of the heads of Treasury, DOJ, State, DHS, Commerce, Energy, and a few others, this high level committee is the most powerful government organ you have never heard of. It is not required to sign off on every business deal, but when they choose to review one, their veto is final. There is no process of appeal.¶ This incredibly strong executive power of the Presidency can be exercised any time there is some foreign element to a domestic business transaction. Given the integrated nature of our global economy that finds a non US actor in nearly every major aspect of our domestic commerce, this has some potential to become an almost dictatorial power if left unchecked.¶ In the case of Ralls, the jurisdiction is certainly clear, this investment is being made by two Chinese private investors, Dawei Duan and Jialiang Wu, but the CFIUS only issued a veto. It failed to give any reasons for its actions or even offer any conditions by which the committee’s concerns, whatever they are, could be resolved. The CFIUS simply prohibited the transaction outright while even going so far as to prohibit Ralls’ Oregon assets from being sold to a US buyer to cut their losses. It’s as if the Obama administration’s goal is simply to condemn the project itself, using the nationality of the investors as a mere jurisdictional fig leaf.

#### Arbitrarily excluding oil and gas is worse – sends a signal of inconsistency in CFIUS review that chills foreign investment

MICHAELS ’11 (Jon D.; Acting Professor – UCLA School of Law, “The (Willingly) Fettered Executive: Presidential Spinoffs in National Security Domains and Beyond,” 97 Va. L. Rev. 801, l/n)

In addition, by insulating the crucial work of CFIUS from the President, there is likely to be a higher level of consistency over time (and between presidential administrations) than if the President had sole discretion. 311 This is because the interests advanced by cabinet officials involved in the decisionmaking may reflect common institutional goals across administrations, rather than just partisan or presidential objectives. 312 Consistency over time is especially important in this space given the need to accommodate core regulatory questions, diplomatic considerations, national-security concerns, and the interests of the parties to the proposed transaction - coupled with the inability to explain publicly what, if anything, [880] distinguishes superficially inconsistent outcomes. 313 Without judicial review, changes in presidential administrations would lead to destabilizing about-faces in administrative governance of foreign investment. 314 Although much is made in the administrative law literature about ossification, 315 the converse - administrative vacillation - can be just as problematic. It is problematic not just for legitimacy reasons but also because uncertainty substantially increases costs to regulated parties. 316 American companies seeking to attract foreign investors and foreign investors seeking business opportunities in the United States already express unease about having to submit to CFIUS review. Prospective investors would have even colder feet and perhaps fewer deals would be pursued, especially in the months leading up to a presidential transition, were foreign-investment regulation more variable and unpredictable. 317 Investigations, mitigation negotiations, and final recommendations [881] that need to go through the Committee's inter-agency deliberative ringer - and thus are not simply a function of presidential predilections 318 - potentially go a long way in minimizing that unease. Further, this deliberative process conveys to participants that the legally and politically unaccountable framework for foreign-investment review is nevertheless rational and rigorous. 319 [882] Though the foreign investors might not on their own be clued in to this and other subtleties, many rely on a relatively small group of experienced lawyers who deal regularly with CFIUS and can counsel their clients accordingly. 320

#### Few transactions are blocked, negotiations check, referral is voluntary, and the president could always block anyway

MICHAELS ’11 (Jon D.; Acting Professor – UCLA School of Law, “The (Willingly) Fettered Executive: Presidential Spinoffs in National Security Domains and Beyond,” 97 Va. L. Rev. 801, l/n)

CFIUS's responsibilities today are substantially the same as they were under Exon-Florio. 90 It is charged with reviewing proposed transactions, 91 a process that begins when CFIUS is notified by the parties to the proposed transaction and that lasts no longer than thirty days. 92 Notification is voluntary. 93 Because foreign acquisitions falling within CFIUS's ambit that are not reviewed in advance by CFIUS "remain subject indefinitely to divestment or other appropriate actions by the President," 94 there has always been a strong incentive for opting in. 95 If that review leads CFIUS to find evidence of a threat to national security, 96 CFIUS is obligated to initiate a more rigorous, formal investigation lasting no more than forty-five days. 97 Actions taken by the President or the Committee are not subject to public scrutiny 98 or judicial review. 99 [825] CFIUS must notify Congress of its recommendations (though not necessarily the terms or tenor of mitigation negotiations), 100 and provide the legislature with an annual, confidential report summarizing the transactions reviewed or investigated in the past year. 101¶ Two elements of CFIUS scrutiny are especially significant. The first is the breadth of the definition of national security. The precise meaning has never been defined in the U.S. Code or via regulation. 102Congress has enumerated factors that CFIUS should consider in determining whether a transaction threatens national security. 103 But the factors are broad and malleable, and could easily be read to include consideration of economic security, too. 104¶ The second is CFIUS's aforementioned authority to negotiate with the parties seeking to consummate the deal. 105 When CFIUS encounters troubling aspects of deals, it negotiates mitigation agreements with the parties to minimize the putative security concerns. 106 [826] One notable mitigation agreement arose out of the French company Alcatel's acquisition of Lucent. CFIUS conditioned its endorsement of the acquisition on Lucent's special research division - Bell Labs, which does extensive classified work for U.S. national-security agencies - remaining largely off-limits to Alcatel personnel. 107 In another, CFIUS required Lenovo, a firm owned in part by the Chinese government and seeking to acquire IBM's PC business, to agree to wall itself off from the identity of U.S. government purchasers of IBM products and from two IBM buildings. 108¶ CFIUS rarely advises the President to block a proposed investment, 109 and the President has been even more selective in actually [827] blocking an investment. 110 Yet of the proposed deals that raise serious national-security concerns (about 1.6% of all cases brought to CFIUS's attention), 111 many are undone not by the President's formal decision to block an acquisition, but rather earlier - through attrition at the review and investigation stages, and in the course of mitigation negotiations. This is where the Committee's subtle but substantial influence is most felt. 112 From 1990 to 2008, "nearly half of the transactions CFIUS investigated were terminated by the firms involved, because the firms decided to withdraw … rather than face a negative determination by CFIUS," 113 or rather than accept mitigation terms imposed by CFIUS that would make the acquisition less economically (or, assuming ulterior motives, less politically 114) [828] desirable. 115 Indeed, the central importance of informal CFIUS negotiation - as opposed to official, formal presidential decisions to approve or block foreign investments - is not unlike that of plea-agreements vis-a-vis courtroom verdicts in the vast majority of criminal matters. 116

### 1nc protectionism

#### No protectionist escalation

**Ikenson, 12** [March 5th, Daniel, [Daniel Ikenson](http://www.cato.org/people/daniel-ikenson) is director of the Herbert A. Stiefel Center for Trade Policy Studies at the Cato Institute,

<http://www.cato.org/publications/free-trade-bulletin/trade-policy-priority-one-averting-uschina-trade-war>]

An emerging narrative in 2012 is that a proliferation of protectionist, treaty-violating, or otherwise illiberal Chinese policies is to blame for worsening U.S.-China relations. China trade experts from across the ideological and political spectra have lent credibility to that story. Business groups that once counseled against U.S. government actions that might be perceived by the Chinese as provocative have changed their tunes. The term "trade war" is no longer taboo.¶ The media have portrayed the United States as a victim of underhanded Chinese practices, including currency manipulation, dumping, subsidization, intellectual property theft, forced technology transfer, discriminatory "indigenous innovation" policies, export restrictions, industrial espionage, and other ad hoc impediments to U.S. investment and exports. ¶ Indeed, it is beyond doubt that certain Chinese policies have been provocative, discriminatory, protectionist, and, in some cases, violative of the agreed rules of international trade. But there is more to the story than that. U.S. policies, politics, and attitudes have contributed to rising tensions, as have rabble-rousing politicians and a confrontation-thirsty media. If the public's passions are going to be inflamed with talk of a trade war, prudence demands that the war's nature be properly characterized and its causes identified and accurately depicted.¶ Those agitating for tough policy actions should put down their battle bugles and consider that trade wars are never won. Instead, such wars claim victims indiscriminately and leave significant damage in their wake. Even if one concludes that China's list of offenses is collectively more egregious than that of the United States, the most sensible course of action — for the American public (if not campaigning politicians) — is one that avoids mutually destructive actions and finds measures to reduce frictions with China.¶ Nature of the U.S.-China Trade War¶ It should not be surprising that the increasing number of commercial exchanges between entities in the world's largest and second largest economies produce frictions on occasion. But the U.S.-China economic relationship has not descended into an existential call to arms**.** Rather, both governments have taken protectionist actions that are legally defensible or plausibly justifiable within the rules of global trade. That is not to say that those measures have been advisable or that they would withstand closer legal scrutiny, but to make the distinction that, unlike the free-for-all that erupted in the 1930s, these trade "skirmishes" have been prosecuted in a manner that speaks to a mutual recognition of the primacy of — if not respect for — the rules-based system of trade. And that suggests that the kerfuffle is containable and the recent trend reversible.1

#### No net increase in protectionism

Robert Plummer, 9-17-2012; BBC News, “Protectionism: Is it on the way back?” <http://www.bbc.co.uk/news/business-18104024>

It seems that free-trade and protectionist tendencies are fairly evenly balanced among the great powers, **with every nationalist impulse countered by a liberalising one.** This "one step forward, one step back" behaviour can be seen in the EU as well, beset as it is by the crisis in the eurozone. The recent French presidential election saw both the successful challenger, Francois Hollande, and the defeated incumbent, Nicolas Sarkozy, stepping up their protectionist rhetoric in an effort to woo the 80% of voters who are anti-globalisation. However, as has often been stated beyond the country's borders, France is a big winner from globalisation, with French companies doing 14 times more business abroad than foreign firms do in France. Mr Hollande has said he wants French financial aid to go to exporters of French products. But if he is serious about his campaign promise to create 150,000 new jobs in France, many analysts feel he will have to promote more competition in the economy, not less - in other words, more liberalisation and less protectionism. In any case, the German Chancellor, Angela Merkel, has long maintained that a return to protectionism would be a grave danger for the global economy, making it unlikely that Mr Hollande will get his way at a pan-European level. 'Fortress Mercosur' Other regions of the world, notably Latin America, are similarly blowing hot and cold in the same trade debate.

#### Alt causes outweigh

**Zappone, 12** [January, Chris, Sydney Morning Herald, 'Murky protectionism' on the rise - but no trade war, <http://www.smh.com.au/business/world-business/murky-protectionism-on-the-rise--but-no-trade-war-20120110-1pt3t.html>]

At the outset of the global financial crisis, the world’s leaders pledged to resist calls to shield their local economies in order to prevent a trade war that could further damage global growth.¶ Four years on, with China slowing, Europe heading into recession and a political environment soured by successive financial crises, the question arises: how long will policymakers be able to resist those calls for more protectionism?¶ “Free trade is going to be under pressure,” said Lowy Institute international economy program director Mark Thirlwell. “Since 2007-08 the case for moving to greater trade liberalisation has got tougher and the demands for protection have increased.”¶ Only last week, China, which is grappling with a slowdown, raised the prospect of a trade war with the European Union in response to the EU's implementation of a carbon emissions tax on air travel to and from Europe. Earlier last month China imposed tariffs up to 21 per cent on US-made cars, affecting about $US4 billion imports a year.¶ Advertisement ¶ Across the Pacific, US politicians in the throes of an election year with 8.5 per cent unemployment have issued more strident calls for China to “play by the rules” and allow the yuan to appreciate faster against the US dollar. The US has also asked the World Trade Organisation to probe China's support for its solar panel industry and the restrictions Beijing has placed on US poultry imports.¶ In fact, the most recent WTO data shows that the number of trade restrictive measures enacted by members rose 53 per cent to 339 occurrences over the year to October.¶ Yet the WTO admits that the motives behind the spate of actions aren’t always simply to protect local jobs. “Not all measures categorised as trade restrictive may have been adopted with such an intention,” the body said.¶ In Brazil, for example, the steep rise in the value of its currency, the real, has sparked a torrent of car imports into the country - similar to the online-overseas shopping boom in Australia. Brazil has in turn put a one-year provisional 30 per cent increase on auto imports, to counterbalance the effects of their strong currency.¶ In the US, China and Australia, infrastructure spending measures contain “buy local” requirements to stoke domestic growth, not necessary punish foreign businesses. The federal government in September streamlined its anti-dumping system that eases the way for companies to ask for investigations into imported goods that come in below market value to Australia. Again, well within the rules.¶ “What we’ve seen is a gradual ratcheting up of trade intervention,” said Mr Thirlwell, amounting to what he calls “murky protectionism” or government intervention through support for industries or complaints to global trade authorities.¶ To date, observers such as Mr Thirlwell say most countries have remained remarkably resistant to throwing up significant trade barriers.¶ For example, in November, the US, Australia and seven other Asian-Pacific nations including Japan, outlined the plan for an ambitious multilateral Trans-Pacific Partnership trade block worth 40 per cent of the world’s trade, in an effort to increase the flow of cross-border goods and investment. Japan, China and South Korea are also in the later stages of negotiation over a free trade deal between those three nations.¶ Australian National University international trade lecturer John Tang doesn’t believe the world is on the edge a new round of protectionism.¶ “I don’t see a general sea change towards protectionism for major trading blocks but that may be because so much of the industrialised world is relying on developing countries to sustain their exports,” he said.¶ Nevertheless, a shift in the political reality of the US, China or elsewhere could change that, he said.¶ Washington DC-based Brookings Institution fellow Joshua Meltzer said that if the euro zone broke up, elevating the crisis to a new stage, nations may switch to much more protective measures.¶ ‘‘I wouldn’t go so far to say the global economy is so integrated that we could never have anything that would approach a trade war,” said Washington DC-based Brookings Institution fellow Joshua Meltzer. “But I don’t think we’re on that track.”

#### Trade does not solve war—there’s no correlation between trade and peace

**MARTIN, MAYER, AND THOENIG 2008 (**Phillipe, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, and Centre for Economic Policy Research; Thierry MAYER, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, CEPII, and Centre for Economic Policy Research, Mathias THOENIG, University of Geneva and Paris School of Economics, The Review of Economic Studies 75)

Does globalization pacify international relations? The “liberal” view in political science argues that increasing trade flows and the spread of free markets and democracy should limit the incentive to use military force in interstate relations. This vision, which can partly be traced back to Kant’s Essay on Perpetual Peace (1795), has been very influential: The main objective of the European trade integration process was to prevent the killing and destruction of the two World Wars from ever happening again.1 Figure 1 suggests2 however, that during the 1870–2001 period, the correlation between trade openness and military conflicts is not a clear cut one. The first era of globalization, at the end of the 19th century, was a period of rising trade openness and multiple military conflicts, culminating with World War I. Then, the interwar period was characterized by a simultaneous collapse of world trade and conflicts. After World War II, world trade increased rapidly, while the number of conflicts decreased (although the risk of a global conflict was obviously high). There is no clear evidence that the 1990s, during which trade flows increased dramatically, was a period of lower prevalence of military conflicts, even taking into account the increase in the number of sovereign states.

### 1nc china coop

#### No China war

**Ross, 9** – professor of political science at Boston College (Robert, The National Interest, “Myth”, 9/1,

http://nationalinterest.org/greatdebate/dragons/myth-3819)

Despite impressive Chinese advances, in maritime East Asia the United States retains military superiority and effective deterrence and war-fighting capacities. But just as the United States cannot base policy on an exaggerated assessment of the China threat, it cannot allow strategic complacency to undermine U.S. security. Washington must maintain those capabilities that underpin U.S. strategic partnerships with the maritime states in China's neighborhood and a favorable regional balance of power. Respect for Beijing's strategic potential requires that U.S. defense policy continues to stress advancement of those capabilities that support American power projection in the western Pacific Ocean, even as the United States prepares for a protracted era of counterinsurgency warfare. Short-term contingencies cannot preclude attention to long-term great-power competition. If the United States maintains its focus on the multiple sources of maritime supremacy, including carrier-based power projection, subsurface platforms and information technologies, it can continue to engage the rise of China without undermining U.S. security.

#### No South China Seas conflict

Pradt 12 – PhD candidate at the Freie Universität of Berlin (Tilman, "ASIA’S NEW GREAT GAME? THE GEOPOLITICS OF THE SOUTH CHINA SEA," Political Reflection, Vol. 3, No. 1)

First, the US has not a real interest in permanently (and substantially) upgrading its military presence in the region. Given the still severing US budget situation and the persistent security situation in the Middle East and Central Asia, policy-makers in Washington are trying to reduce its forces de-ployed to foreign areas not to enlarge them by opening up a new theatre. Plus, the US is mainly interested in the security of the sea lanes and its guaranteed free passage, therefore President Obama’s push on the littoral states to solve their SCS disputes. The US is **not interested in confronting** China directly but to put pressure on Beijing to be more conciliatory in case of the SCS dis-putes. The deployment of US Marines to Darwin is merely presenting the stick not using it (imagine Beijing’s reactions to the US establishing a mili-tary base in Vietnam). Beijing, on the other hand, will now take pains to somehow ease the situation in the SCS and to regain trust among its neighbours of the ASEAN. China has to accept that the US will now sit at the table of future rounds of territorial discussions and China no longer can use its relative power in bilateral negotiations with small ASEAN states. This is probably hard to swallow for Chinese policy-makers given their repeatedly stated premise that the SCS disputes shall be solely discussed among the regional states con-cerned. But in this changed situation, the contin-ued refusal to accept multilateral discussions will provoke further military build-up and confronta-tion in the SCS. Finally, India got only involved because of perceived Chinese assertiveness in the Indian Ocean. India’s military build-up and assumed ambitions towards the SCS is a response to Chi-na’s actions in what India perceives as its territori-al waters. A reciprocal withdrawal will avoid fu-ture naval confrontations among the two Asian heavyweights.

#### Chinese FDI is increasing

Laura Tyson 8-2-2012; a former chair of the US President's Council of Economic Advisers, is a professor at the Haas School of Business at the University of California, Berkeley. The Benefits of Chinese FDI <http://www.project-syndicate.org/commentary/the-benefits-of-chinese-fdi-by-laura-tyson>

So far, China’s FDI outflows have been concentrated in developing countries and a handful of resource-rich developed countries, including Australia and Canada, and have been aimed at facilitating trade and acquiring access to natural resources. But the patterns and destinations of China’s outward FDI will change as rising wages, an appreciating real exchange rate, and the entry of new suppliers from other emerging countries erode Chinese companies’ competitiveness, motivating them to invest abroad to upgrade their technology and management capabilities, find new growth opportunities, and move up the value chain. Currently, the US receives only about 2-3% of FDI flows from China. But **China’s direct investments in the US have increased rapidly**, from less than $1 billion annually in 2003-2008 to more than $5 billion per year in 2010-2011. At least 38 US states now host FDI projects from China, and competition for Chinese investment has intensified as states’ budgets have contracted.

#### Energy coop impossible

Lieberthal and Herberg 6; Kenneth, Distinguished Fellow and Director for China at The William Davidson institute, and research associate of the China Center at the University of Michigan, and Mikkal, Director of the asian Energy security program at The national bureau of asian research, China’s Search for Energy Security: Implications for U.S. Policy\*, <http://www.nbr.org/publications/nbranalysis/pdf/vol17no1.pdf>

The United States and China seem to hold **fundamentally different** views of global energy markets. This reality makes effective dialogue on energy issues both more difficult and more necessary. China’s energy strategy currently appears rooted in a statist, mercantilist mentality among political leaders in Beijing. The United States, on the other hand, has a stated policy of relying largely on global markets to deliver energy supply security. The United States does not always fully appreciate how its own colossal weight in global energy and geopolitics affects China’s concerns regarding U.S. ability to threaten China’s energy interests. Ed Morse, an expert on energy and politics, sums up the problem by asserting that, “The U.S. is mostly ‘brawn’ and limited ‘brain’.” Suspicions remain high both in Beijing and Washington regarding the other’s intentions on key energy security and supply questions.

#### FDI decisions not key

Lieberthal and Herberg 6; Kenneth, Distinguished Fellow and Director for China at The William Davidson institute, and research associate of the China Center at the University of Michigan, and Mikkal, Director of the asian Energy security program at The national bureau of asian research, China’s Search for Energy Security: Implications for U.S. Policy\*, <http://www.nbr.org/publications/nbranalysis/pdf/vol17no1.pdf>

Second, distrust of energy markets is aggravated by the perception that these markets are dominated by the United States, a perception that overlaps with concerns that the United States is out to exploit China’s energy weakness. Based upon **strategic dominance in the Persian Gulf**, the U.S. **Navy’s control over critical energy transport** sea lanes, **and enormous power in the global oil industry** and institutions, many believe that the United States exerts a powerful influence on global oil prices and flows.14 The projection of U.S. power into the Persian Gulf and Central Asia in the wake of September 11 has further aggravated these fears. Strident rhetoric in the United States during the 2005 CNOOC-Unocal episode has strongly reinforced these perceptions.15 Third, in terms of energy sector capabilities, Beijing feels that China is working from a position of weakness and must play “catch-up.” Excluded from the major institutions governing global oil cooperation (such as the IEA) and forced to rely upon NOCs that are relatively new and weak competitors in the dynamic global oil industry, China feels dominated by the large, powerful, and technologically sophisticated oil companies that Beijing feels help to defend the interests of Western industrial countries. All these factors combine to give a mercantilist character to China’s energy security drive and to Beijing’s rhetoric about its energy security concerns. And this perception of China’s strategy strongly conditions the U.S. reaction, which characterizes China’s strategy as a state-led challenge to U.S. energy and security interests. Such perceptions suggest the need for a much closer look at how China’s global energy strategy is actually developed.

#### Chinese growth fails

Lieberthal and Herberg 6; Kenneth, Distinguished Fellow and Director for China at The William Davidson institute, and research associate of the China Center at the University of Michigan, and Mikkal, Director of the asian Energy security program at The national bureau of asian research, China’s Search for Energy Security: Implications for U.S. Policy\*, <http://www.nbr.org/publications/nbranalysis/pdf/vol17no1.pdf>

China’s energy policies and institutions accentuate demand growth and aggravate energy supply and infrastructure shortages. Subsidized energy prices promote excessive demand growth, which in turn increases pressure on supplies and infrastructure to move energy around the country. At the same time, investment in improving energy efficiency is badly underfunded.12 Although Beijing has begun to recognize the need for demand-side energy reforms, the government has moved cautiously out of fear of the impact of higher energy prices on employment, inflation, and social stability. There appears to be a growing recognition of these problems among China’s top leadership. Such concerns are evident in recent efforts to reorganize energy policymaking, most notably the 2005 establishment of a new State Energy Office, which reports to a new Energy Leading Group headed by Premier Wen Jiabao.13 Nevertheless, the pace of reform remains slow. In short, China’s domestic energy supply-demand gap **poses challenges to ongoing rapid economic growth**. As this problem becomes more acute over time, energy imports will play an increasing role in China’s economy. Put simply, energy security has become an issue of the “high politics” of national security, not just the “low politics” of domestic economic policy.

#### US demand is crucial to oil exporter revenue – transition to domestic energy would devastate petrostates

Gregory D. Miller, April 2010; assistant professor of political science at the University of Oklahoma, “The Security Costs of Energy Independence” Center for Strategic and International Studies The Washington Quarterly • 33:2 pp. 107119 http://csis.org/files/publication/twq10aprilmiller.pdf

The United States should not maintain its dependence on oil simply to prevent economic instability in Russia, regional conflict in the Middle East, or the growth of the drug trade in Venezuela, but the United States must be cautious regarding how it goes about reducing its consumption. Some states are even more **dependent on oil revenues** than the West is on oil imports, and the United States must be careful about rushing toward energy independence without first considering the unintended consequences. The United States only gets about 15 percent of its oil from the Middle East. Nearly 22 percent of all OPEC oil, however, is sold to the United States.26 The United States is the world’s largest consumer of oil (more than 25 percent), and a reduction in U.S. demand **will have a dramatic effect on the price of oil and on the** **world’s oil-exporting states.** The real effects of a drop in U.S. consumption are difficult to predict and may depend on how the United States reduces its demand. If it does so simply through conservation, then the gradual decline in demand will likely have minimal effects on oil exporters. On the other hand, a drastic drop in demand, such as that associated with the development of a new technology, will have significant economic repercussions for a number of countries, even those that do not sell much oil to the United States.

### iran page

#### Squo solves

Downs, China fellow at Brookings, 7-19-12 (Erica S. Downs is a fellow at the John L. Thorton China Center at The Brookings Institution, "Getting China to Turn on Iran," July 19, <http://nationalinterest.org/commentary/getting-china-turn-iran-7215>)

**Despite Beijing’s implication** that China would continue to import oil from Iran at 2011 levels (more than 550,000 barrels a day), the main Chinese buyer of Iranian crude oil, Sinopec, responded to the new U.S. sanctions by **dramatically cutting its purchases** fromIran by 25 percent in the first five months of 2012. At the end of every year, Chinese oil traders negotiate their supply contracts with National Iranian Oil Company (NIOC) for the following year. The commencement of their negotiations in late 2011 coincided with growing support in Washington, especially on Capitol Hill, for ratcheting up the pressure on Iran by subjecting foreign firms that do business with the CBI—the primary clearinghouse for Iranian oil transactions—to U.S. financial sanctions. When China’s oil traders sat down at the negotiating table with their Iranian counterparts, Iran’s increasing international isolation was palpable. Sinopec pushed for lower prices and a longer credit period, while NIOC insisted on higher prices and a shorter credit period. The two companies did not sign a new contract until late March 2012 (with Sinopec reportedly extracting some concessions, which have not been disclosed publicly), causing the plunge in China’s **crude oil** imports from Iran.

#### China not key to sanctions regime

John A. Tures, 5-24-2012; Professor at LaGrange College Surprise! Sanctions Are Working on Iran, Myanmar, and Other Rogue States http://news.yahoo.com/surprise-sanctions-working-iran-myanmar-other-rogue-states-215400167.html

After months of defiance, Iran seems to be knuckling under the new round of sanctions imposed this year. It may change the perception of whether or not sanctions work. Sanctions have been debated in this country since Thomas Jefferson tried to end British impressment of American sailors in 1807 with an Embargo Act, without much success. The track record of international sanctions didn't get better with the advent of the League of Nations. Boycotting some postage stamps didn't stop the Japanese from taking Manchuria from China. Withholding trade from Mussolini's Italy didn't keep them from brutally occupying Ethiopia before World War II. Then there was the Cold War era. American sanctions didn't seem to stop Fidel Castro in Cuba, or the Ayatollahs in Iran. United Nations actions against South Africa's apartheid regime took forever. The Hoover Institute, New York Times, and even "Freakonomics" declared sanctions to be failures. But sanctions have had a recent run of success. Myanmar's regime released Aung San Suu Kyi. Sanctions contributed to the overthrow of the genocidal regime of Slobodan Milosevic. And now Iran is crawling back to the negotiation table, after months of saying sanctions wouldn't hurt. Why are they working now? 1) You Need Support From Heavy Hitters. Sanctions fail when the target can buy from another source. That's why they failed in the days of early America, as well as the League of Nations. The Freakonomics source was wrong: sanctions didn't work in South Africa because the whites ashamed of European sanctions. Those had been around for years. They failed for so long because the United States didn't join in. Four years of American sanctions did more than 40+ years of anti-apartheid sanctions for a reason. In the case of Iran, America used to be a lonely voice on sanctions. But with British, French and the rest of Europe with us, the sanctions have real teeth. Russia doesn't need a lot of what Iran has. China will trade, but **at a lopsided rate** that provides **little benefits for Iran**, citing the higher cost of doing business with a rogue state. 2) The Sanctions Need To Be "Smart." The old thinking was that sanctions would hurt the people, who would then rise up and topple the bad regime, or at least make life difficult for them. But all that did was make the government stronger, and the people too weak or desperate for their next meal to think about revolution. George W. Bush deserves credit for implementing the concept of "smart sanctions." Those target the leadership, instead of the people. Those sanctions brought North Korea to the bargaining table. They are also making life difficult for leaders of Myanmar and Iran, leading to the prospect of real change, instead of continued defiance. 3) Somebody Has To Make Up For Market Losses. Iran thought they had the West over a barrel, vowing to jack up oil prices and close the Straits of Hormuz. But the Saudis and other oil producers made up for the losses in oil on the world market. Alternative pipelines bypassed the narrow straits in the Persian Gulf. That's why oil prices dramatically spiked, then climbed back down. Iran just lost their best weapon against sanctions. 4) You've Got To Punish Lawbreakers. In the past, folks got away with breaking sanctions, with little or no consequence. Sanctions-breaker Marc Rich got a pardon from the Clinton Administration. Bain & Co. got away with their Iran dealings. But newer legislation implemented this year by the Obama Administration and Republicans in Congress punishes those dealing with Iran. Iran has now crawled back to the bargaining table after initial hubris and claims that sanctions wouldn't hurt. Their economy is in shambles. But the West doesn't have to agree to it. Ahmadinejad's allies got pounded at the polls. Continued sanctions should provide an even more favorable deal that would keep Iran nuclear-free, so long as the Israelis don't get jumpy and attack.

#### Japan, India, and Pakistan trading are all alt causes

Hadaf Zubi 7-2-2012; manager at Liquid Capital Corp., North America’s most geographically diverse commercial finance firm; writer for OilPrice.com, “Are US Sanctions Against Iran Working?” http://www.cnbc.com/id/48048870/Are\_US\_Sanctions\_Against\_Iran\_Working

Iran’s main success in thwarting attempts to curb its oil sales has been the provision of temporary insurance policies. Protection and Indemnity (P&I) Insurance is a form of marine insurance provided by a mutual insurance association whose members lay off risk on one another. This form of insurance is necessary to cover the liabilities that heavy tankers carrying oil in sensitive coastal areas incur. As of July 1, European P&I clubs cannot extend coverage to ships carrying Iranian oil, which greatly hamper Iranian efforts to market their oil. Necessity has led to the diminishment of this harm to Iran’s oil exports, though. Japan, prior to the closing of its nuclear power facilities earlier this year, generated almost 30 percent of its energy through nuclear power. After the Fukushima disaster, Japan has largely been forced to import oil to make up for the shortfall. Japan tried to gain an EU exemption to this insurance ban, but to no avail. Due to these circumstances, the absence of Eurozone-based P&I insurance has been replaced by a $7.6 billion Japanese government-sponsored insurance facility which was offered beginning June 27. Although this will decrease the amount of Iranian oil imported to Japan, it shows the flexibility of some of the arrangements that have taken place in order to **circumvent economic sanctions.** India has also skirted sanctions and the insurance ban by securing an exemption from U.S. sanctions by cutting its imports of Iranian oil by 20 percent, which allow its to continue to import Iranian oil while furthering Delhi’s own nuclear ambitions. In this case, P&I coverage is being provided by the Iranian government. Additionally, Iranian trade delegations have arranged to buy rice, sugar and soybeans from India with rupees, not dollars, which mitigates the effects of Iran not being able to readily access U.S. funds. Following this lead, Iran has also entered into negotiations with Pakistan to barter wheat for oil.

#### Can't sway China

Reuters 11-10-2011; China says sanctions no "fundamental" answer on Iranhttp://www.reuters.com/article/2011/11/10/us-china-iran-nuclear-idUSTRE7A920V20111110

(Reuters) - China's Foreign Ministry said on Thursday that sanctions cannot "fundamentally" resolve the Iran nuclear dispute, after Western leaders urged expanded sanctions against Iran over a U.N. watchdog report that Tehran has worked to design atom bombs. "We always believe that dialogue and cooperation is the right way to solve the Iranian nuclear issue. Sanctions cannot fundamentally solve the issue," Chinese Foreign Ministry spokesman Hong Lei said. "The pressing task now is all parties concerned step up diplomatic efforts," Hong added. International Atomic Energy Agency (IAEA) concluded in a report this week that Iran appears to have worked on designing an atomic weapon. "We hope the IAEA will be fair and objective, and actively committed to clarifying the salient issues through cooperation with Iran," he said. "This is the pressing task at this stage." The Chinese spokesman's remarks underscored the tough task facing Western governments who hope to win Beijing's backing for tougher United Nations sanctions on Iran.

#### No Israel strikes

David Blair 8-23-2012; David Blair is the Chief Foreign Correspondent of the Daily Telegraph.Four reasons why Israel probably won't attack Iran <http://blogs.telegraph.co.uk/news/davidblair/100177697/four-reasons-why-israel-probably-wont-attack-iran/>

So was I wrong? Well, I’m going to stick my neck out and argue that my conclusions from April are still valid. War is not around the corner and it might not happen at all. I claim no great insight and I could be proven wrong tomorrow if Israel were attack targets across Iran. But here’s why I think the case against panic remains conclusive: 1. War with Iran would be bad for Israel. The Iranian people would probably respond to outside attack by rallying behind their leaders and strengthening a deeply unpopular regime. Iran would hit back through Hizbollah in Lebanon and by trying to close the Strait of Hormuz, with serious civilian casualties in Israel and incalculable consequences for the global economy. In Syria, Bashar al-Assad would have the opportunity to pose alongside Iran as a dual victim of a Zionist plot against the Muslim world. It might be just the boost that Assad needs. And the best the Israeli air force could achieve would be to delay – not derail – Iran’s nuclear ambitions. Israel’s pilots would impose nothing more than a relatively short interval before Iran achieves nuclear weapons capability anyway. In fact, a war could have the opposite effect to the one desired. Iran’s leaders want the ability to build a Bomb, but they have not yet decided whether to actually go ahead and become a nuclear-armed state. If Israel attacks, they would be compelled to take a decision – and we can all guess what it would be. 2. Israel’s military and security leadership understands all of the above. Sundry ex-Mossad chiefs have publicly argued that hitting Iran would be a bad idea. General Benny Gantz, the current chief of staff and Israel’s most senior soldier, has given a sober and measured assessment of Iran’s intentions. He thinks that Iranian leaders are “very rational people” who, in the final analysis, will not go ahead and build a Bomb – assuming they aren’t attacked, of course. Israel’s decision-makers cannot ignore these arguments, even supposing their air force has the ability to inflict more than temporary damage on Iran’s nuclear facilities, which seems unlikely. 3. The outlines of a deal between Iran and America are emerging. I don’t mean a formal agreement, still less a “Nixon goes to China” diplomatic breakthrough. I’m not suggesting that the Obama administration is about to announce that secret diplomacy with Iran has solved the problem. I mean that both sides might quietly decide they can live with the status quo. In other words, Iran comes close to the ability to build a nuclear weapon, but its leaders refrain from going the final mile and actually manufacturing a Bomb. America, for its part, lives with an Iran on the threshold of nuclear capability, provided that Tehran holds back and opts not to become a nuclear-armed state. Iran and America might feel their way towards an implicit arrangement along these lines. 4. That could be the least worst option for the West. Ayatollah Ali Khamenei, the Supreme Leader of Iran, is 73 and sick. No-one knows what’s wrong with him (pancreatic cancer, say some, prostrate cancer, say others). It doesn’t matter: the point is that he could disappear from the scene at any moment. Meanwhile, President Ahamdinejad is a lame duck who will go at the end of his term in June. So it’s perfectly possible that Iran will have a new leadership in a year or two – and that could create an opening. Until then, preserving the status quo is the least unappealing option. To sum up, I think the real objective of American and Western policy is to keep Iran exactly where it is – ie, some way short of the ability to build a nuclear weapon – until the inevitable moment of political change arrives in Tehran. Hence the emphasis on direct sabotage of the nuclear programme. It’s all about slowing down the nuclear clock and obstructing all Iran’s efforts until the current leadership disappears of its own accord. That is an entirely sensible objective. If Iran were to embark on a sudden sprint to a nuclear weapon – something that would require the expulsion of United Nations inspectors and formal withdrawal from the non-proliferation treaty – then every calculation would change. If Iran radically alters the status quo, military action might become the least awful option. But for Israel to throw all the pieces in the air by going to war in the next few months would be the height of folly. I don’t believe it will happen.

## 2nc

### topicality

#### This evidence also has ZERO intent to define – it also proves our violation – the evidence explicitly says that there are NO legal guidelines for reviews and there is no clear criteria for what constitutes a violation of said ‘restriction’

IEFL Inside Energy with Federal Lands 4/12/2010 (Herman Wang, HEADLINE: Foreign energy investments spark security concerns)

Foreign firms appear to be increasingly interested in investing in US oil companies, electric utilities and other parts of the US energy infrastructure, as they are seeking to profit from America's appetite for oil, coal and other commodities, as well as the Obama administration's emphasis on renewable power. But with those deals will come scrutiny from a little-known federal panel that has the power to block the transactions for national security reasons, through a review process that industry insiders say is sometimes inconsistent, politically driven and opaque. The Committee on Foreign Investment in the United States is an inter-agency panel that gave the Energy Department a permanent seat in 2007 to help it investigate business transactions in which foreign governments or companies seek to acquire "major energy assets" in the US. But some experts say CFIUS does not offer enough up-front guidance to US companies that are being acquired by foreign interests, wasting time and money. "We face situations where we tell our clients we see no security risk," said Billy Vigdor, a Washington-based partner with law firm Vinson & Elkins. "And then we spend hours trying to figure out whether we should file [a disclosure] because the government might think it is, in fact, a security risk. The last thing you want is to have a contract in place, and you think you're going to close in 30 days, and then CFIUS calls and says you need a filing." Companies being acquired by a foreign-owned firm can voluntarily notify CFIUS of the transaction, but the committee also has the power to investigate all transactions it sees fit to review. Representatives from 16 federal departments and agencies, headed by the Treasury Department, comprise the committee. Those investigations can leave foreign companies feeling unfairly targeted, potentially discouraging needed foreign investment in US energy infrastructure, said Al Troner, president of Houston-based Asia Pacific Energy Consulting. Troner said CFIUS' rulings on what constitutes a security threat can be arbitrary and inconsistent. Even when the committee determines there is no security risk for a transaction, politics can sometimes trump the ruling, Troner said. Troner cited CFIUS' approval in 2006 of a deal by a Dubai-based company to manage several US ports, only to have the company back out after many lawmakers cried foul due to fears of terrorism. "We want investment, but we want 'safe' investments, even though we can't define what is safe," Troner said. "So a big problem in all this is uncertainty, which makes this a funny market to invest in. [Foreign firms] don't feel treated fairly as to what the criteria are for energy security. If you don't know what you're getting into, at a certain point, you ask if this is worth it." Steven Cuevas, who was DOE's director of investment security in 2007 when the department gained a seat on CFIUS, said the committee makes its decisions apolitically. CFIUS, originally established in 1975, received a legislative mandate in 2007 to tighten its oversight of foreign transactions, including defining critical infrastructure as an asset so vital that its incapacity or destruction would severely impact national security. A bill signed by then-President George W. Bush, sparked in large part because of the uproar over the Dubai Ports World deal, formalized CFIUS' review process, which until then had been loosely defined and applied. That same bill also gave DOE its seat on CFIUS. The committee reviews about 150 to 200 foreign business deals a year. "We left politics at the door," Cuevas said. "As with any national security program, you really need to look at the issues in national security and not worry about politics. It's not a situation where there's a bright-line rule. You have to look at each transaction by itself. The standard is, does this transaction, by itself, pose a risk to national security?" Richard Oehler, a Seattle-based partner with law firm Perkins Cole, said prior to the 2007 legislation, CFIUS primarily concerned itself with defense contracting and other issues related to defense and intelligence. The legislation, however, with its definition of critical infrastructure, put an increased focus on US energy assets. "They were not focused on energy, until the politicians redefined [CFIUS]," Oehler said. Cuevas, now a renewable-energy lobbyist with French-owned nuclear company Areva, was a Bush administration political appointee assigned the task of setting up DOE's new role on CFIUS. He said he could not disclose, for confidentiality reasons, how many transactions DOE reviewed during his time working on the committee. Cuevas left his DOE post in 2009 with inauguration of the Obama administration. "When we started the CFIUS program at DOE, we had no processes in place," he said. "There was no record keeping. I spent the last year and a half with the department trying to standardize those steps of review, who signs off on transaction, who tracks them. We were simply trying to keep up with the transactions. We set the foundation, and the folks that are there now are fleshing it out." Last month, DOE issued a draft policy outlining its role on CFIUS that is similar to the Bush administration's policy. The policy, signed by DOE Deputy Secretary Daniel Poneman, prescribes that the department's risk analyses must consider the "criticality and/or vulnerability of the US assets being acquired" and "the threat to those assets posed by the acquiring entity and the consequences to national security if the threat is realized." Each transaction must also be reviewed on whether it involves critical infrastructure and technology, as well as how the transaction would impact long-term projections of US energy consumption. In addition, if a foreign government-owned entity is involved in the transaction, DOE will assess "the adherence of the subject country to nonproliferation control regimes, including treaties and multilateral supply guidelines," the draft policy states. After the review, DOE can clear the transaction with no further action; refer it to CFIUS for a 45-day national security investigation; clear the case conditionally, pending the creation of a "mitigation" plan to resolve security concerns; or recommend to the president to block the deal. Energy Secretary Steven Chu is DOE's primary representative to CFIUS, but much of the department's responsibilities on the committee are delegated to Jonathan Elkind, DOE's principal deputy assistant secretary for policy and international affairs. Elkin was not available for comment. Cliff Vrielink, a Houston-based partner with Vinson & Elkins, said CFIUS can sometimes give US companies pause when seeking to be acquired by a foreign firm. "CFIUS presents a hurdle for a foreign buyer that a domestic buyer doesn't have," Vrielink said. "When someone as an asset they want to sell, and they have an auction where multiple companies have put in bids, the foreign buyer has the uncertain timing of a CFIUS filing, which can be a significant factor." Complicating matters for foreign companies is the fact that CFIUS reviews are not based on a clear set of guidelines and regulations outlining, for instance, how much of a US company a foreign firm can acquire without triggering an investigation. "We, as Americans, are fortunate in that in so many areas, we have bright-letter law, and I think that's one thing that's always been an attraction for foreign investment, that we have the sanctity of contracts and bright-letter law," Vrielink said. "But what a lot of foreign investors find a little frustrating is that that's not what they see [with CFIUS reviews]."

#### The only effect of these delays is company cost – which is NOT a ‘restriction’ – they are distinct

EC (European Communities) May 2004 “Dominican Republic – Measures Affecting the Importation and

Internal Sale of Cigarettes” http://trade.ec.europa.eu/doclib/docs/2008/february/tradoc\_137962.pdf

That said, the European Communities would note that it appears that a “fee” is not necessarily an “exchange restriction” within the terms of Article XV:9(a) of the GATT. The ordinary meaning of the term “restriction” is “a limitation on action, a limiting condition”.4 Thus, while it is of course true that a fee would make foreign exchanges more expensive, this does not necessarily entail a limitation on the availability of foreign currencies. Thus, the exception under Article XV:9(a) of the GATT may not be pertinent in this case.

#### Marchick evidence substantiates our claim that this ‘restriction’ is frivolous – 99.9% of transactions get through – the ‘restriction’ has only been implemented ONCE in its history

Marchick 07 (David, partner at Covington and Burling, where he advises

companies on the CFIUS process, “Swinging the Pendulum too Far: An Analysis of the CFIUS Process Post-Dubai Ports World,” Jan, http://www.nfap.net/researchactivities/studies/NFAPPolicyBriefCFIUS0107.pdf)

In the 18 years that Exon-Florio has been in force, there have been slightly more than 1700 CFIUS filings. Only one transaction has formally been blocked by the President — a 1990 aerospace investment by a Chinese company. From the data, one would think that CFIUS has merely been a rubber stamp, approving 99.9 percent of the acquisitions. The data belie actual practice, since tough restrictions are imposed by CFIUS as a condition for approval — typically through “mitigation” or “national security” agreements. In addition, parties typically will abandon a transaction in the face of a possible rejection rather than force the President to formally block a proposed acquisition. The public relations damage to a company if a President were to block an acquisition would be substantial.

#### Vinson and Elkins is clearly referring to a definition from the CHINESE GOVERNMENT

Vinson and Elkins LLP 12 (VandE China Practice Update E-communication, “China Amends Foreign Investment Policy: New Foreign Investment Industry Guidance Catalogue,” January 13, http://www.velaw.com/resources/pub\_detail.aspx?id=20405)

On December 24, 2011, China’s National Development and Reform Commission (NDRC) and Ministry of Commerce (MOC) jointly issued a new, revised version of its Foreign Investment Industries Guidance Catalogue (the “Catalogue”). The Catalogue will become effective January 30, 2012, and will replace the existing version of the guidance catalogue promulgated in late 2007. Background China first published the Catalogue in 1995 in order to regulate the inflow of foreign investment in a manner consistent with the central government’s economic development objectives. Over the years, the Catalogue has subsequently been revised several times to conform with China’s commitments under its Protocol of Accession to the World Trade Organization (WTO) and to reflect China’s continued economic and social development. The latest amendments to the Catalogue reflect China’s current emphasis on improving the quality of foreign investment to promote the development of high and new technology, valued-added manufacturing, efficient use of resources, and environmental sustainability. \*\*\*THEIR CARD BEGINS\*\*\*The Catalogue classifies foreign direct investments in the various Chinese industry sectors as “encouraged,” “restricted,” “permitted,” or “prohibited,” and sets out specific industries in which foreign investment is either “encouraged,” “restricted,” or “prohibited.” Activities not listed are, in the absence of other rules to the contrary, considered to be “permitted” for foreign investments. Foreign investment in “encouraged” industries may enjoy certain tax benefits and is often subject to less strict administrative requirements from approval authorities. The “restricted” category includes industries into which foreign investment is subject to a higher level of scrutiny, stricter administrative requirements, and may be denied at the discretion of the approval authorities. Foreign investment is not permitted in industries categorized as “prohibited.”\*\*\*THEIR CARD ENDS\*\*\*

#### Even if it is a legitimate interpretation - Simply imposing a monitoring and reviewing system to scrutinize is explicitly not a ‘restriction’ – it is merely supervision

Jean Schiedler-Brown (Attorney at Law Offices of Jean Schiedler-Brown &

Associates) June 19 2012 Appellant Brief of Randall Kinchloe v. States Dept of Health, Washington, http://www.courts.wa.gov/content/Briefs/A01/686429%20Appellant%20Randall%20Kincheloe%27s.pdf

The ordinary definition of the term "restrictions" also does not include the reporting and monitoring or supervising terms and conditions that are included in the 2001 Stipulation. Black's Law Dictionary, 'fifth edition,(1979) defines "restriction" as; A limitation often imposed in a deed or lease respecting the use to which the property may be put. The term "restrict' is also cross referenced with the term "restrain." Restrain is defined as; To limit, confine, abridge, narrow down, restrict, obstruct, impede, hinder, stay, destroy. To prohibit from action; to put compulsion on; to restrict; to hold or press back. To keep in check; to hold back from acting, proceeding, or advancing, either by physical or moral force, or by interposing obstacle, to repress or suppress, to curb. In contrast, the terms "supervise" and "supervisor" are defined as; To have general oversight over, to superintend or to inspect. See Supervisor. A surveyor or overseer. . . In a broad sense, one having authority over others, to superintend and direct. The term "supervisor" means an individual having authority, in the interest of the employer, to hire, transfer, suspend, layoff, recall, promote, discharge, assign, reward, or discipline other employees, or responsibility to direct them, or to adjust their grievances, or effectively to recommend such action, if in connection with the foregoing the exercise of such authority is not of a merely routine or clerical nature, but required the use of independent judgment. Comparing the above definitions, it is clear that the definition of "restriction" is very different from the definition of "supervision"-very few of the same words are used to explain or define the different terms. In his 2001 stipulation, Mr. Kincheloe essentially agreed to some supervision conditions, but he did not agree to restrict his license.

#### he guidance report explicitly says that the reviews to not target ANY sector in particular and is an across the board regulation – not a specific restriction

US Federal Register 2008 “Guidance Concerning the National Security Review Conducted by the Committee on Foreign Investment in the United States” 73 Fed. Reg. 74,570 http://www.treasury.gov/resource-center/international/foreign-investment/Documents/CFIUSGuidance.pdf

This section describes covered transactions that CFIUS has reviewed (having received voluntary notices regarding the transactions) and that have presented national security considerations because the transaction involves a U.S. business that provides goods or services that directly or indirectly contribute to U.S. national security. As noted above, CFIUS is focused on identifying and addressing national security risks posed by covered transactions, regardless of the industry of the parties to the transaction. Accordingly, CFIUS does not focus on any one U.S. business sector or group of sectors. Since its inception, CFIUS has received and reviewed voluntary notices regarding transactions across a broad spectrum of the U.S. economy. The following description of covered transactions that CFIUS has reviewed and that have presented national security considerations is illustrative only

#### This means they violate “on” – it implies the source of the restriction is specifically on energy production

Dictionary.com No Date

http://dictionary.reference.com/browse/on?s=t

“ON”:16. (used to indicate a source or a person or thing that serves as a source or agent): a duty on imported goods; She depends on her friends for encouragement.

#### Even if they don’t violate – vote negative on presumption – here is the part of the footnote Clark is referencing – it includes reviews over WAY more than just energy production – including several more important portions of the business value chain. If their uniqueness evidence is correct – the US will just use other restrictions on investment to mess with foreign companies it finds to be threatening. The aff will be viewed as an insultingly small concession and have ZERO impact on impementation

US Federal Register 2008 “Guidance Concerning the National Security Review Conducted by the Committee on Foreign Investment in the United States” 73 Fed. Reg. 74,570 http://www.treasury.gov/resource-center/international/foreign-investment/Documents/CFIUSGuidance.pdf

CFIUS has also reviewed numerous covered transactions that have presented national security considerations because of the nature of the U.S. businesses, but without regard to government contracts. The U.S. businesses in these cases have operations, or produce or supply products or services, the security of which may have implications for U.S. national security. For example, some of these transactions involved U.S. businesses in the energy sector at various stages of the value chain: The exploitation of natural resources, the transportation of these resources (e.g., by pipeline), the conversion of these resources to power, and the provision of power to U.S. Government and civilian customers. Other transactions have involved U.S. businesses that affect the nation’s transportation system, including maritime shipping and port terminal operations and aviation maintenance, repair, and overhaul. Transactions involving U.S. businesses that could significantly and directly affect the U.S. financial system have also accounted for a number of covered transactions reviewed by CFIUS that have presented national security considerations.

### solvency

#### Seriously crushes solvency for every advantage

Zheng 9-31 – (Henry, “Obama Rejection of Oregon Chinese Wind Farms Will Cost America Jobs” http://www.policymic.com/articles/15581/obama-rejection-of-oregon-chinese-wind-farms-will-cost-america-jobs) Jacome

On Friday, President Obama issued a formal [order](http://online.wsj.com/article/SB10000872396390444712904578024590739979984.html?mod=googlenews_wsj) blocking the Chinese-owned firm, Ralls Corp., from acquiring wind farm projects in Oregon. This was the first time since 1990 –during President George H.W. Bush's administration– that a U.S. president has directly blocked a foreign acquisition. This maneuver has added to the **faltering confidence** of Chinese investors in recent years, which view the U.S. as aggressive in curbing the rapid rise of Chinese economic and political influence. Such a precarious relationship between the two dominant global economic powers is troubling because [investment](http://blogs.cfr.org/renewing-america/2012/09/28/obama-slapdown-on-chinese-wind-deal-sends-wrong-message/) from China could create up to 400,000 jobs for Americans by 2020.

Of course, the notion of China actually creating local jobs in America may be hard to digest amid the political rhetoric in an election year, one in which President Obama has [urged](http://news.yahoo.com/blogs/ticket/obama-plan-insourcing-help-revive-u-manufacturing-182159316.html) American businesses to bring manufacturing jobs back to U.S. soil in a term he called "insourcing." However, there may not need to be a conflict between creating more jobs for the domestic economy and accepting foreign direct investments (FDI) from countries such as China. According to a recent [report](http://rhgroup.net/notes/the-employment-impacts-of-chinese-investment-in-the-united-states) by Rhodium Group, Chinese employers of U.S. affiliate companies usually retained existing staff and, in many instances, added to them.  Even more important is that their projects involve establishing facilities such as factories, research and development centers, and distribution centers that have long-term economic benefits for local American communities, contrary to the popular belief that China will "strip" American assets and ship products back to their country to solely benefit the Chinese.

The order was based on concerns voiced by the Committee on Foreign Investment in the United States (CFIUS), an interagency effort headed by Secretary of the Treasury Timothy Geithner. Apparently, the [project was too close](http://www.latimes.com/news/custom/la-na-china-wind-farms-20120929,0,5616624.story) to the Naval Weapons System Training Facility, which is also a testing site for flying military drones. The Chinese firm's lawyer is not convinced that this is the actual reason as there are already wind turbines operating in the area where the project is located. This incident is seen by Chinese investors as one in a long line of attempts in recent years to specifically stem China's role in the U.S. economy, and by extension curtail China's growing economic influence. Similar controversies involve the Chinese government-owned China National Offshore Oil Corporation's (CNOOC) [withdrawal](http://www.washingtonpost.com/wp-dyn/content/article/2005/08/02/AR2005080200404.html)of its bid to acquire the California-based Unocal after an antagonistic stance adopted by the U.S. government and Congress's ongoing [allegations](http://www.reuters.com/article/2012/09/13/us-huawei-hearing-idUSBRE88C03R20120913) against telecommunications giant Huawei selling devices that may be "booby-trapped."

Moreover, President Obama's halt of the acquisition have contributed to the prevalent Chinese belief that **there is an anti-China sentiment brewing in Washington** that involves more than our domestic security concerns. In the recent [issue](http://www.chinausfocus.com/foreign-policy/how-china-sees-america/) of Foreign Affairs, China sees the U.S. as a destabilizing influence, largely because the U.S. military is established in sensitive regions where it could undermine Chinese dominance in the South China Sea and help opposing parties in controversial maritime disputes. The article notes that this belief is extremely important to understanding how Chinese political and military leaders deal with strategic encroachments from the United States. This reaction has translated over to Chinese concerns that the U.S. may try to restrict its growing global economic importance, which have made business leaders more conservative in their foreign investment outlook.

#### They have to amend the definition of “national security” in the Exon-Florio process to access any of their broader spillover claims – the aff just arbitrarily waives restrictions for one sector of the economy without redefining “national security” – this is a zero risk of solvency argument because they don’t meet any coherent or logical threshold to resolve the perception problems in Exon-Florio

Carroll, 9 - \* Notes & Comments Editor, Emory International Law Review; JD (Jamie, 23 Emory Int'l L. Rev. 167, “BACK TO THE FUTURE: REDEFINING THE FOREIGN INVESTMENT AND NATIONAL SECURITY ACT'S CONCEPTION OF NATIONAL SECURITY” lexis)

Conclusion

Exon-Florio should be amended to more narrowly define national security. The open-ended nature of the current definition has allowed the process to become politicized. Instead, national security should be specifically defined so as to prevent acquisition of industries that are critical to the military aspects of our national defense and that have capacities that are not duplicable by other market entities. The definition should also serve to ensure that export control laws are not circumvented by foreign acquisition of American companies. The following proposed definition would once again focus on preventing foreign governments from gaining unique military capabilities through private transactions that could threaten American national security:

National Security shall be defined so as to consider the following factors in reviewing foreign acquisitions:

A. Potential effect upon assets essential to the military aspects of national defense, specifically those firms whose contributions to the national defense cannot be easily replaced by another domestic corporation;

B. Whether the acquisition poses a substantial risk of espionage or terrorism that can be certified by the relevant United States intelligence agencies;

C. Whether the acquisition would pose a unique risk of weapons proliferation of critical military assets that cannot be otherwise dealt with by United States laws, particularly to countries that are not allies of the United States;

[\*198] D. Economic security, or any other factor not mentioned in this section, shall not be considered by the CFIUS process. n222

Such an interpretation of national security would heavily scrutinize acquisition of, or joint ventures with, Lockheed Martin or any other company that makes a large contribution to the defense industrial base. Certain high-tech companies that produce computer chips that give the U.S. armed forces technological advantages over other countries might also fall under this definition. China should not be allowed to acquire a controlling interest in the present-day equivalent of Fairchild Semiconductor.

This proposed definition of national security would be even more limited than the original Exon-Florio signed by President Reagan, as Exon-Florio was designed to apply mainly to defense-based technological acquisitions. n223 The main difference between this definition of national security and the original Exon-Florio legislation is that this definition would codify national security to **explicitly prevent protectionist use of the CFIUS for political ends**. Any consideration **of economic security** or protection of energy assets from foreign acquisition would be excluded from this definition, as inclusion of such economic factors **can only encourage protectionism and politicization** of the CFIUS process. n224

The narrower definition of national security would eliminate the mandatory reviews of every foreign-government-controlled transaction as required by FINSA. n225 Instead, the CFIUS would be given flexibility to decide which transactions truly threaten national security, without being bound to review every governmental acquisition. Narrowing the definition of national security in this manner would allow the CFIUS to focus its resources on real national security threats, rather than waste resources analyzing nearly every transaction involving a foreign governmental takeover. n226

The CFIUS should certainly consider the prospect of terrorism and take every step possible to safeguard against such a risk. In many cases, safeguards such as extra scans on containers should be put in place to minimize the risk of [\*199] terrorism. These safeguards should be applied regardless of whether the ownership is foreign or domestic. n227 Protectionism cannot replace the Department of Homeland Security when it comes to defending critical infrastructure. n228 Besides, the terrorists who struck on 9/11 did not own substantial property within the United States. Nor would the CFIUS regulations have stopped the subsequent terrorist incidents, such as Richard Reid's attempted shoe bomb or the anthrax shipments. In fact, there is no evidence that any company has been used as a front for a terrorist plot. n229

However, transactions should be blocked by the CFIUS on the basis of homeland security only when there is evidence of a clear and present threat of terrorism, or perhaps of espionage or sabotage. If the term "critical infrastructure" must be kept in FINSA, then members of Congress and the CFIUS must do a better job articulating what exactly constitutes critical infrastructure and what they consider the link between foreign ownership of critical infrastructure and threats to national security. n230 Explicitly laying out such guidelines will illustrate the boundaries to foreign investors and will make CFIUS decisions seem less arbitrary and political. n231 Additionally, screening employees of foreign corporations that purchase critical infrastructure can often identify potential security vulnerabilities without taking the drastic step of vetoing a transaction. n232

Limiting the Exon-Florio definition of national security only to military threats may seem odd and reactionary in the post-9/11 world, where unconventional threats abound. However, counter-terrorism requires appropriate tools, and regulating foreign direct investment simply falls short of being a cost-effective method of ensuring homeland security. n233 Focusing on the nationality of a company's ownership in a globalized world only distracts us from real security threats posed by non-state actors. n234 Many terrorist threats do not exist as a result of primary support from any nation, but rather as tactics in service of an ideology. n235 As Jose Padilla, John Walker Lindh, and [\*200] many others have illustrated, no one ethnic group has a monopoly on Al-Qaeda membership or support. Instead of penalizing investments from various Arab states simply because terrorists draw support from that region, homeland security policy should focus on thwarting the terrorists themselves. The CFIUS must return to a focus on state military capabilities because the terrorist threats are from non-state actors, and restricting economic investment from certain nations does not, per se, deal with the threat of terrorism. Just because terrorism is a serious threat does not mean that the CFIUS is the best tool to protect critical infrastructure.

In conclusion, 9/11 did radically change the world, and Exon-Florio should change to fit the new realities of homeland security. However, the most effective reform of Exon-Florio is not expansion of the definition of national security to include economic protectionism, but rather a narrowing of the definition to guard against real threats to American security while encouraging beneficial foreign investment. The security challenges of the twenty-first century cannot be met by protectionism. Only by embracing globalization and cooperation can the United States truly achieve national security.

#### Congress and the public will backlash regardless of CFIUS - scuttles deals before they reach review – empirically proven

MATTHEW R. Byrne 2006, J.D., The Ohio State University Moritz College of Law, expected 2007, Protecting National Security and Promoting Foreign Investment: Maintaining the Exon-Florio Balance, OHIO STATE LAW JOURNAL, 2006, http://moritzlaw.osu.edu/students/groups/oslj/files/2012/04/67.4.byrne\_.pdf

CNOOC’s attempt to acquire Unocal occurred in the summer of 2005. After a much-publicized bidding and public relations war for control of Unocal between CNOOC and another major U.S. oil company, Chevron, Inc., CNOOC’s bid was ultimately defeated by political pressure applied by the United States Congress.8 Many members of Congress had publicly and forcefully expressed grave reservations about the possible national security repercussions if China’s state-owned company gained control of Unocal’s oil reserves.9 This debate led to discussion of not only national security, but also economic security.10 **Even though CFIUS never initiated a review** of the CNOOC transaction, let alone gave the transaction its approval, numerous members of Congress who feared that the Committee would not block the transaction began to suggest that changes to the Exon-Florio statute were in order as a means to address these concerns.11 This debate over changes to Exon-Florio resumed in early 2006, when DPW attempted to purchase Peninsular and Oriental Steam Navigation Co. (“P&O”), a British firm, in a $6.8 billion deal.12 With the acquisition of P&O, the Dubai-based company would have acquired operational control of certain terminals at six U.S. ports.13 The revelation that CFIUS had approved the deal set off a firestorm of criticism on Capitol Hill as members and leaders of both political parties in Congress denounced the merger.14 Though DPW and the Bush Administration agreed to conduct an additional fortyfive- day investigation under the CFIUS statute, the House Appropriations Committee voted 62–2 **to effectively block the transaction**, and under intense political pressure DPW agreed to transfer its U.S. ports interests to an American buyer.15 In the midst of the ports controversy, legislation was proposed in Congress not only to block the deal, but also to make substantial changes to the Exon-Florio statute in an attempt to strengthen the CFIUS review process.16 As of the time this Note goes to publication, committees in both the House and Senate have approved legislation that would modify the Exon-Florio statute.17 The full bodies have not yet approved these bills, their significant differences have not been reconciled in a conference committee, and the President has not signed a bill. Therefore, these bills’ proposed changes to the statute are still mere possibilities, not certainties.

#### The plan exacerbates inconsistencies in FDI policy – sends a chilling effect that crushes Chinese investment

Xu et al 12 (Ting, with Thieß Petersen and Tianlong Wang, Cash in Hand: Chinese Foreign Direct Investment in the U.S. and Germany, June,

http://www.bfna.org/sites/default/files/publications/Cash%20In%20Hand.pdf)

As a result of the different regulatory environment for Foreign Direct Investment and different considerations of sensitive industries for national security purposes, some Chinese firms have had quite different experiences in their investment activities in the U.S. and in Germany, resulting in divergent perceptions. The U.S. has been widely perceived, fairly or unfairly, in China as lacking transparency towards Chinese FDI. The complaint has been brought up to the top-level leadership in China. In May 2011, the Chinese commerce minister openly questioned the credibility of the U.S. investment investigation process: “Even though those who were rejected were the minority, **the possibility of being rejected** by the U.S. **has scared away** Chinese **companies** that are taking the initial steps to invest abroad. We hope that American government and mediate institutions can tell us more clearly where we can invest and where we cannot.” (Caixin News 2011) This complaint seldom is heard about Germany. Particular Uncertainty for U.S.-bound Chinese FDI The lack of transparency surrounding the CFIUS process–particularly the lack of a **clearly defined** industry blacklist or **a set of credibility criteria guiding review of investments**—has created uncertainty among investors. This in turn may deter otherwise benign and mutually beneficial FDI from China. However, the emphasis on CFIUS and on the deterred deals by media is largely overblown and it taints the image that in general the U.S. wants to attract Chinese FDI. CFIUS has covered 313 transactions from 2008–2010, only 16 of which involved Chinese acquirers compared to 91 transactions of UK origin. That said, it is understandable that Chinese companies are under heavier scrutiny, given that Japan over the same period had roughly the same number of covered transactions, while the Netherlands and Finland combined had fewer than China (CFIUS 2011, 18). These countries take a far more significant share in FDI in the U.S. than China (See Figure 9).

### china

#### Trade, relations, and security cooperation seriously resilient

Joe Barnes et al 2011; BONNER MEANS BAKER FELLOW JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY, RICE UNIVERSITY “THE RISE OF CHINA AND ITS ENERGY IMPLICATIONS” http://www.bakerinstitute.org/publications/EF-pub-RiseOfChinaBarnesCoanElass-120211-WEB.pdf

Today, relations between the United States and China reflect the complex array of subjects that both join and divide them. Levels of trade and investment between the two countries, for instance, are simply astonishing: In 2010, the United States was China’s top trade partner, with a total trade volume of more than $450 billion.20 Two old issues—Taiwan and human rights—continue to bedevil Sino-American relations. To date, however, the two countries have navigated disputes in ways that have avoided conflict. A possible crisis in early 2001—the forced landing of a U.S. spy plane in China—was, after a few days of harsh words, finessed with no major repercussions for bilateral relations.21 Moreover, China and the United States have successfully collaborated on a number of international initiatives, most notably—if still unsuccessfully—the six-party talks aimed at halting North Korea’s nuclear weapons programs. In its first commitment far from home, China contributed peacekeepers to Lebanon starting in 2006, and China also has several ships patrolling against pirates off the Somali coast.22 China and the United States both currently have military personnel in the United Nations (U.N.) Stabilization Mission in the Democratic Republic of the Congo (MONUSCO) and a military as well as a police presence in the U.N. Mission in Liberia (UNMIL).23 Both countries are in the Association of Southeast Asian Nations (ASEAN) Regional Forum, designed to foster dialogue on political and security interests.24 China and the United States are also in various international nuclear organizations including the Nuclear Suppliers Group and the Zangger Committee.25 Earlier this year, China and the United States agreed to establish a facility in China to provide training on the detection of radioactive materials to address the smuggling of nuclear and radiological materials and set up a Center of Excellence on Nuclear Security in China in order to promote nuclear security and safeguards.26

#### We would wipe the floor with China

Joe Barnes et al 2011; BONNER MEANS BAKER FELLOW JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY, RICE UNIVERSITY “THE RISE OF CHINA AND ITS ENERGY IMPLICATIONS” http://www.bakerinstitute.org/publications/EF-pub-RiseOfChinaBarnesCoanElass-120211-WEB.pdf

On the one hand, the two countries are competitors for world energy supplies. In 2010, the United States and China were the world’s largest consumers of oil, using 19.1 million b/d and 9.2 million b/d respectively.54 The United States fields a vast naval and air apparatus to ensure that it can depend upon the flow of oil to world markets. These same forces, of course, are capable of interdicting energy supplies to China in a crisis. Today and for the foreseeable future, China is simply incapable of challenging the United States on the high seas. Beijing, for its part, is clearly aware of the vulnerability created by increasing energy imports. This is reflected both in its efforts to secure partnerships with energy producers such as Sudan and Iran and in its drive to diversify supply by building pipelines from Central Asia. Chinese firms have had some of their first international forays into Sudan55 and have signed multibillion-dollar deals to develop Iranian oil and gas fields and refineries in the past few years.56

#### Won’t escalate – no confrontation between ASEAN and China

Anita Abbott 7-18-2012; University of Waikato, Department of Political Science and Public Policy, New Zealand; “Energy security and cooperation in South China Sea” <http://www.oilvoice.com/n/Energy_security_and_cooperation_in_South_China_Sea/f72c1c9e100f.aspx>

The South China Sea is currently the subject of dispute involving China-ASEAN members. Most ASEAN (Association of Southeast Asian Nations) members and China have claimed the Spartlys and the Paracels as their territories, and acknowledge the importance of the South China Sea for its shipping routes and vast reserves of oil and natural gas. According to a 2008 report from the U.S. energy information administration, oil reserves in South China Sea are estimated to be more than 213 billion barrels, which is equal to ten times the American oil reserves. Vietnam's accusation that China's vessels cut the cables to exploration ships, China's claim to a gas rich zone near Natuna Island, which Indonesia occupies, and China's claim to the Mischief Reef that is also claimed by the Philippines as part of its territory, render to the on-going dispute. Recently China and the Philippines have disputed the ownership of Scarborough Shoal, 100 miles off the coast of the Philippine, in which both have claimed as theirs. China's view is that multilateral negotiations for the dispute resolution will complicate matters, preferring instead unilateral negotiations, which give China distinct leverage, whereas ASEAN agree that international intervention by way of multilateral negotiation is essential. ASEAN members, however, are unable to pressure China to accept international intervention, specifically negotiation, as the basis for the dispute resolution. Non-alliance with great powers, such as the United States renders to ASEAN states' inability to pressure China. ASEAN members have approaches to the conflict resolution: cooperative security, such as 1976 Treaty of Amity and Cooperation (TAC) for the peaceful settlement of disputes, and ASEAN's 1992 Manila Declaration; comprehensive security, such as Indonesia's approach to foreign diplomacy; and national security as they have developed naval forces to defend their Exclusive Economic Zone (EEZ) claims. With regard to ASEAN's response to China's claim to part of South China Sea, Malaysia desires to include the United States as Malaysia distrusts China. Indonesia claims to be a neutral country, and although not intimidated by China, does not confront China but expects the United States to play a role as a mediator in the dispute. By including the United States, Indonesia has more bargaining power. Vietnam distrusts China and seeks support from the United Support for the dispute. Singapore, although not involved in the maritime dispute, is engaged in the advanced stage of talks with the United States over the deployment of new, highly advanced warships. The Philippines also distrusts China due to their dispute over the Mischief Reef. Like other ASEAN members, the Philippines seeks support from the United States under an historic 1951 treaty in which the US was obligated to defend the Philippines. Like Singapore, Thailand does not have a maritime dispute with China but China's aggressive stance towards the Philippines inflicts Thailand with suspicion. Nonetheless, Thailand maintains a relationship with China by having China as its weapons supplier. Laos, Cambodia, Myanmar, and Brunei do not have disputes with China but enjoy friendly relationships with China. The South China Sea disputes, however, are not a serious threat to the national security of ASEAN members. This explains why ASEAN members do not confront China. Nonetheless, several ASEAN members welcome the presence of the United States' navy. The challenges for ASEAN members would remain: it is unlikely that China will give up territory in the South China Sea as China is hungry for energy resources. Welcoming the United States' presence is a good start as the United States can be a buffer for China's presence in South China Sea. Involving the United States in ASEAN Regional Forum (ARF) and East Asia Summit (EAS) without leaving Russia out has been a strategic approach in ASEAN-China dispute in South China Sea. The United States also has its interests in the South China Sea: the Sea lines of Communication (SLOCs). It is then likely that the United States is willing to be involved in the South China Sea. One formidable challenge for ASEAN members remains: China is ardently avoiding multilateral negotiations, and has so far refused to negotiate outside bilateral agreements. It then depends on the assertiveness of ASEAN members to encourage China to be involved in multilateral agreements.

### iran page

#### Economics have no effect – but threatening war would prevent nuclearization

Meghan L. O'Sullivan 7-6-2012; Meghan L. O'Sullivan is an international affairs professor at Harvard University's Kennedy School, a former deputy national security advisor and a fellow at the Council on Foreign Relations. “Will Iran crack?” Op-Ed <http://articles.latimes.com/2012/jul/06/opinion/la-oe-0705-osullivan-sanctions-iran-20120706>

But the Iranians didn't seize the opportunity. Instead, they demanded recognition of their right to enrich. This tough stance hardly indicates they perceived themselves to be under the sword of Damocles. Instead, it suggests that Tehran had decided to weather any and all economic pressure, seeing it as an unwelcome but possibly necessary cost of pursuing its nuclear ambitions. The transmission belt between economic pain and political change is, of course, dynamic. As policymakers and market watchers evaluate the new sanctions, the economic barometer may not be the best predictor of whether Iran's leaders are going to make a strategic shift. Here's what else to focus on: Whether the negotiation track remains alive. Absent negotiations, intensified sanctions are likely to reinforce Tehran's perception that the West is only interested in regime change, which could prompt an acceleration of the nuclear program rather than an abandonment of it. Whether the threat of military force becomes more credible. Thus far, Tehran probably dismisses both the damage that Israeli military strikes could achieve on their own and the likelihood the United States would use military force. If the latter were perceived to be a real possibility, Tehran might change its calculations.

#### Iran won’t provoke Israel enough – public support will collapse

**Menon, 1/27**/12 - Professor of International Relations, Lehigh University (Rajan, “Iran, the West, and the Lessons of the Great War,” Huffington Post, http://www.huffingtonpost.com/rajan-menon/post\_2907\_b\_1237370.html)

Apocalyptic scenarios are common these days in discussions of Iran. One involves an Iranian nuclear "breakout" (in plain English, Tehran detonates a bomb). Another centers on or an out-of-the-blue preventive attack by Israel, which then creates irresistible pressure on the United States to follow suit, especially in an election year when who's really tough is among the questions candidates are telling voters to ask themselves about their rivals. But there's little chance that any of the parties to the crisis will take the World War II route to war.

Iran's leaders are not dumb. They know that as long as they don't cross the nuclear Rubicon, they can avoid isolation and ensure that China and Russia block any Security Council resolution that tightens existing sanctions and lends international legitimacy to the added pressure. More importantly, Tehran understands full well that clear signs of an impending breakout will provoke an American, or more likely Israeli, attack.   
Western leaders routinely underscore Iran's increasing isolation. But a number of important states (aside from Russia and China, consider India, Brazil, and Turkey) are troubled by the hard-line that Israel and the West have taken toward Tehran; and they flatly reject the use of force against it. In Israel, top former military and intelligence officials have warned that an attack on Iran would be counterproductive, and is indeed unnecessary, and public opinion polls show that most Israelis oppose a military strike.

In a word, Iran will not abruptly do something dramatic on the nuclear front that increases and solidifies the international opposition and that exposes it to a military attack. Tough rhetoric (threats to close the Straits of Hormuz) and symbolic acts (the recent naval maneuvers) plus denials of the charge that it is building nuclear weapons: that's Iran's game for now. And it won't change.

## 1nr

### elections impact ov

#### Turns their china advantage – Romney makes relations belligerent

**Stokes and Hatchigian, 12** [U.S.-China Relations in an Election Year Taking the Long View in a Season of Heated Rhetoric, Jacob, Research Assistant at the Center for a New American Security (CNAS), where his research focuses on U.S. national security and defense policy. His writing has appeared in CNN.com, Politico, BusinessWeek, The Baltimore Sun, The Guardian and The American Prospect, among other publications, Senior Fellow at American Progress.¶ <http://webcache.googleusercontent.com/search?q=cache:QG6048mP53AJ:www.americanprogressaction.org/issues/2012/03/pdf/us_china_relations.pdf+&hl=en&gl=us>]

Conservatives and progressives today approach the challenge of China very differently. Many conservatives, including most of the Republican candidates for¶ the presidential nomination, are critiquing the Obama administration’s policies¶ on China—a tactic designed to chip away at President Barack Obama’s high poll¶ numbers on national security issues and distract from congressional obstruction-¶ ism on key steps to improve our economic competitiveness at home.¶ But **they are not** offering many sensible ideas**.** Today’s conservative approaches¶ on China—which too often end up shortsighted, inconsistent, emotional, and¶ belligerent—will fail. Strategies that aim for short-term political point scoring—or, even worse, calculated efforts to create a new Cold War enemy—will¶ undermine global security.¶ In contrast, the Obama administration’s approach is steady, clear-eyed, and¶ focused on results. The administration has pushed back on China multiple¶ times—taking China to task on unfair trade, forming a united front to get China¶ to back down from aggressive actions in the South China Sea, and selling arms to¶ Taiwan over furious protests from Beijing. President Obama’s Asia strategy, which¶ is deepening partnerships and engagement in the region, is designed to ensure that¶ as China grows it contributes to peace and stability and follows the rules of the¶ international system. At the same time the administration does not let differences¶ prevent the United States from working with Beijing on important joint challenges such as North Korea’s nuclear program and clean energy.1¶ This progressive approach offers the best tactic for dealing with China because for¶ the foreseeable future China will be both a rival and a partner. Our policymak-¶ ers have to play the long game, ensuring our strategies for China make sense not¶ just during campaign seasons but for this year, this decade, and beyond. Fostering¶ successful policies toward China requires a steady hand and a concerted effort to¶ refrain from overheated tirades and knee-jerk responses.

#### Romney would support an Israeli strike on Iran

Robert W. Merry 8-1-2012; editor of The National Interest and the author of books on American history and foreign policyRomney Edges U.S. toward War with Iran http://nationalinterest.org/commentary/romney-edges-us-toward-war-iran-7275

The major newspapers all understood that GOP presidential candidate Mitt Romney’s expressions in Jerusalem last weekend were important, which is why they played the story on page one. But only the New York Times captured the subtle significance of what he said. The paper’s coverage, by Jodi Rudoren and Ashley Parker, reported that Romney sought to adhere to the code that says candidates shouldn’t criticize the president on foreign soil. “But,” they added, “there were subtle differences between what he said—and how he said it—and the positions of his opponent.” Most significantly, while Obama talks about stopping Iran from obtaining nuclear weapons, Israel insists Tehran should be prevented from having even the capacity to develop nuclear weapons. This means no nuclear development even for peaceful purposes. Romney embraced the Israeli language. In doing so, he nudged his nation closer to war with Iran. Based on Israeli prime minister Benjamin Netanyahu’s oft-repeated expressions, he clearly seems bent on attacking Iran to destroy or delay its nuclear program and, if possible, undermine the Iranian regime. And he wants America at his side when he does it. Obama has been seeking to dissuade Israel from contemplating such an assault in order to give the president’s austere sanctions regimen a chance to work. But what does he mean by “a chance to work?” If he means a complete capitulation by Iran, he’s dreaming, of course. History tells us that nations don’t respond to this kind of pressure by accepting humiliation. That’s the lesson of Pearl Harbor, as described in my commentary in these spaces. Many close observers of the Iran drama believe there may be an opportunity for a negotiated outcome that allows Iran to enrich uranium to a limited extent—say, 5 percent—for peaceful purposes. Iran insists, and most experts agree, that the Non-Proliferation Treaty allows such enrichment for energy production. In any event, numerous signatories to the NPT do in fact maintain limited enrichment programs for peaceful ends. Obama seems torn between pursuing such an outcome and embracing the Israeli position, which demands that Iran foreswear all enrichment and any peaceful nuclear development. In last spring’s Istanbul meeting between Iran and the so-called P5+1 group (the United States, Britain, France, China, Russia and Germany), there seemed to be a genuine interest on the part of those six nations to explore an outcome that would allow for some enrichment by Iran. Five weeks later in Baghdad, the P5+1 group seemed to backtrack and insist upon zero enrichment. Talks are ongoing but only among low-level technical people; any serious negotiations are on hold pending the election. Thus Obama has managed to maintain his flexibility during the delicate campaign period. But now we have Romney in Israel essentially telling the people there that they need fear no ambivalence on his part. If elected, he will embrace the Netanyahu position, which is designed to ensure the collapse of any negotiations attending anti-Iran sanctions, which Netanyahu already has labeled a failure. “We have to be honest,” he said over the weekend, during Romney’s visit, “and say that the sanctions and diplomacy so far have not set back the Iranian program by one iota.” That’s the view that Romney subtly embraced in Jerusalem.

### uniqueness

#### The debates won’t matter – history

**Blumenthal, 10/1/12** - senior polling editor of the Huffington Post and the founding editor of Pollster.com (Mark, New 2012 Polls Show Little Change In State Of Race, http://www.huffingtonpost.com/2012/10/01/2012-polls-obama-romney\_n\_1928472.html?utm\_hp\_ref=elections-2012)

Can Wednesday night's nationally televised debates between Obama and Romney, the first of three to be held between now and late October, be a "game changer" for Romney? Not likely, according to George Washington University political scientist John Sides.

"When it comes to shifting enough votes to decide the outcome of the election," Sides writes in the Washington Monthly, "presidential debates have rarely, if ever, mattered."

Sides cites research by political scientists Robert Erikson and Christopher Wlezien, who studied polling from every election from 1952 to 2008 and found that while debates sometimes nudge results, they rarely produce substantial changes in voter preferences. Erikson and Wlezien found that since 1960, the leader in the polling before the debates remained the leader after the debates.

#### The debates won’t affect anything

**Thrush and Tau, 9/18/12 -** covers the White House for Politico.(Glenn and Byron, “Romney RIP — not so fast” Politico, <http://www.politico.com/news/stories/0912/81369.html?hp=t1_3>)

A 2008 Gallup polling analysis found that debates in 1984, 1988 and 1996 “had little to no impact on voter preferences during the debate period.” In 1980 and 1992, the debates primarily boosted the third-party candidates running in those races.

#### Obama looks tough on China now – wind sale veto marks his policy

CNN, 9/28 (CNN Money, 28 September 2012, “Obama bans wind-farm purchases by Chinese company,” <http://money.cnn.com/2012/09/28/news/economy/obama-china-wind-farm/?iid=EL#TOP)//CC>

NEW YORK (CNNMoney) -- President Obama vetoed the acquisition of four wind-farm companies in the U.S. by a Chinese-owned firm on Friday, citing national security concerns. The companies' projects are all located near a U.S. military site in Oregon, the Naval Weapons Systems Training Facility Boardman, the Treasury Department said in a statement. The firm in question is Ralls Corporation, which is owned by two Chinese nationals and affiliated with a Chinese construction company that makes wind turbines. It acquired the projects earlier this year, but has now been ordered to sell them. Obama's decision marks the first time since 1990 that a president has blocked a business deal for national security reasons, according to a Treasury official. "The President's action demonstrates the Administration's commitment to protecting national security while maintaining the United States' longstanding policy on open investment," the Treasury Department said. "The President's decision is specific to this transaction and is not a precedent with regard to any other foreign direct investment from China or any other country." Related: Obama's mixed record on trade Tim Xia, a lawyer for Ralls Corporation, said it "poses no national security threat whatsoever." "The President's order is without justification, as scores of other wind turbines already operate in the area where Ralls' project is located," Xia said in a statement. He added that the company hopes to mount a legal challenge, though a Treasury official said the President's decision was not reviewable. Obama's move follows a complaint lodged last week with the World Trade Organization alleging that China has illegally subsidized automotive exports and undercut American suppliers. The White House has attempted to project an image of being "tough on China" in economic matters, filing more trade cases against Beijing than the Bush administration did.

### link

#### CFIUS restrictions are key to preventing a political firestorm against Obama

**Rademaker, 11** - With wide-ranging experience working on national security issues in the White House, the State Department, and the US Senate and House of Representatives, Stephen Rademaker advises the Podesta Group’s international clients. Among his accomplishments in public service, he had lead responsibility, as a House staffer, for drafting the legislation that created the US Department of Homeland Security (Stephen, “The Return of CFIUS (Again)” 7/28, <http://www.podesta.com/pulse/return-cfius-again>)

In the midst of terrorist threats, financial crises and political infighting in this country, “foreign ownership” of American companies whose products or services raise national security concerns is becoming an emotionally charged issue.

That’s why overseas investors -- and the domestic companies in which they invest -- need erudite assistance in navigating the little-known federal committee that is responsible for reviewing potential foreign investments in the US.

Consisting of 12 agencies and chaired by the Department of the Treasury, the Committee on Foreign Investment in the United States (CFIUS) administers the Exon-Florio Amendment of 1988 to the Defense Production Act, which authorizes the President to block foreign investment transactions that would impair US national security.

Typically, CFIUS focuses on proposed foreign investments in US firms engaged in sensitive activities, such as manufacturing items that cannot be exported without a US government license due to national security concerns, or contracting with the Department of Defense or other national security agencies. Any foreign investment that would result in “foreign control” of a US business – generally understood as acquiring 10 percent of the equity -- can be subject to CFIUS review.

Although the work of CFIUS remained relatively obscure until 2006, the issue of foreign control of security-sensitive businesses attracted national attention during that year, when Dubai Ports World, a firm owned by the United Arab Emirates, sought to acquire a British firm that operated six port terminals in the US.

CFIUS had already approved this transaction when several members of Congress became alarmed about possible Arab control of US port facilities, portrayed as a potential threat to the security of America’s seaports in the post 9/11 environment. As a result of the ensuing controversy, and the threatened enactment of legislation by Congress, Dubai Ports World divested itself of the six American ports.

After this high-profile controversy, potential investors from Middle Eastern countries, China and Russia, seeking to avoid the kind of political firestorm that had upended the Dubai Ports World transaction, sought expert assistance to ensure that their investments did not trigger a similar reaction. Savvy government relations teams – adept at advising clients on how to structure proposed transactions with minimal political risks and explaining proposed investments to potential critics in Congress, the administration and the news media – were suddenly invaluable to any successful foreign investment strategy.

The economic crisis beginning in 2008 substantially reduced the volume of foreign investment into the US, thereby reducing the number of transactions subject to CFIUS review. Further, the need to attract foreign capital to the US made some foreign investors complacent about the CFIUS process.

But following the 2010 congressional elections, national security sensitivities about foreign investment have re-emerged. This was underscored in October 2010, when the ranking Republican members of the House Committees on Foreign Affairs, Financial Services, Homeland Security and Armed Services sent a joint letter to the Treasury Department objecting to a proposed investment by a Russian uranium mining firm in a Canadian company with uranium mining assets in the US (http://foreignaffairs.house.gov/press\_display.asp?id=1618). This was the kind of congressional reaction that compelled the Dubai Ports World incident.

#### The elections link alone turns the case – public opposition is enough to derail FDI

**Merrill, 11** - \* B.A. Tufts University; J.D. Columbia Law School (Margaret, “Overcoming CFIUS Jitters: A Practical Guide for Understanding the Committee on Foreign Investment in the United States”, 30 Quinnipiac L. Rev. 1, lexis)

The second measure relates to the public's perception of the proposed covered transaction. Considering the highly politicized nature of the CFIUS process, creating a positive public image is crucial for any deal. As discussed above, the negative publicity surrounding past FDI misfires has often played a key role in a transaction's collapse. Time and time again, generating negative media coverage in regards to potential FDI transactions has been a potent tool for private interests looking to gain from the transaction's undoing. This type of maneuvering, however, can also be employed by those who would like to see the transaction consummated. Given the prominent and widespread trepidation over the future strength of economic stability in this country, FDI transactions are likely to be viewed more favorably than they have been in a long time. n232 Proactively reaching out to suitable media outlets with information regarding the benefits of any proposed FDI transaction allows the foreign investor to shape the conversation rather than being on the defensive. The resulting public support for the transaction will make it that much more resistant to political attack.

### iran october

#### No

**UPI, 9/28**/12 (“Obama, Netanyahu Discuss Security Issues” http://www.hispanicbusiness.com/2012/9/28/obama\_netanyahu\_discuss\_security\_issues.htm)

The Israeli leader emphasized Israel's solidarity with the United States, saying, "Israel is in discussions with the United States over this issue, and I am confident that we can chart a path forward together."

His remarks were widely viewed as attempting to smooth over differences with the Obama administration over the urgency of what both countries view as an Iranian nuclear threat.

Netanyahu, who said Washington and Jerusalem were working toward a "common goal" on Iran, said his deadline for a military strike was well past November's U.S. presidential election -- perhaps as late as next summer.

The White House and U.S. military planners had worried about a possible "October surprise" attack by Israel, The New York Times reported.

#### No Israel strike before the election

**Baltimore Sun, 10/1/**12 (Obama-Romney: It's not over yet, http://www.baltimoresun.com/news/opinion/editorial/bs-ed-obama-romney-20121001,0,3464307.story)

•A foreign crisis. There are several simmering conflicts around the world that could pull in the United States in the coming weeks, including the Syrian civil war and the territorial dispute between China and Japan over a small group of islands. But tops on the list of possible game-changers is an Israeli attack on Iran. That's unlikely to happen before the election; Prime Minister Benjamin Netanyahu may have tried to draw a "red line" around Iran at the United Nations on Thursday, but he also made it clear that an attack would not be launched against that nation's nuclear facilities until next spring at the earliest. Still, the prospect of the United States getting drawn into an armed conflict with Iran is clearly on the rise.

### agency

#### Obama is made of Velcro- everything from his administration sticks to him

**Los Angeles Times, 7-30-10**, p. <http://articles.latimes.com/2010/jul/30/nation/la-na-velcro-presidency-20100730>

Reporting from Washington — If Ronald Reagan was the classic Teflon president, Barack Obama is made of Velcro.

Through two terms, Reagan eluded much of the responsibility for recession and foreign policy scandal. In less than two years, Obama has become ensnared in blame.

Hoping to better insulate Obama, White House aides have sought to give other Cabinet officials a higher profile and additional public exposure. They are also crafting new ways to explain the president's policies to a skeptical public.

But Obama remains the colossus of his administration — to a point where trouble anywhere in the world is often his to solve.

The president is on the hook to repair the Gulf Coast oil spill disaster, stabilize Afghanistan, help fix Greece's ailing economy and do right by Shirley Sherrod, the Agriculture Department official fired as a result of a misleading fragment of videotape.

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## 1ac

### 1ac prolif

#### Advantage one is Prolif –

#### Inevitable interest makes nuclear expansion uniquely dangerous now

Banks and Ebinger, 11 [John P, Charles K, John is a fellow with the Energy Security Initiative at the Brookings Institution, Charles is senior fellow and director of the Energy Security Initiative at the Brookings Institution, “Introduction: Planning a Responsible Nuclear Future” in “Business and Nonproliferation”, p. googlebooks]

Nuclear energy is a twentieth-century innovation but until recently has not spread beyond a relatively small number 0F industrialized nations (see maps on pages 4 5). All this is about to change. With global electricity demand increasing dramatically, greenhouse gas emissions, and energy security becoming national priorities, developed and developing countries alike are reexamining nuclear energy as a means of providing a reliable E scalable source of low-carbon power. The International Energy Agency (IEA) projects that global electricity demand will increase 2.2 percent a year to 2035, with about 80 percent of that growth occurring in emerging economies outside the Organization for Economic Cooperation £ Development (OECD).' Even if new policy initiatives are introduced to lower carbon dioxide (CO2) emissions Q combat global climate change, global energy-related CO2 emissions are expected to increase 21 percent between 2008 2035.1 Emerging market economies account For all of this projected increase in emissions. In the face of rising prices and increasing volatility in the oil market, many of these economies have shifted their attention to nuclear energy as a means of reducing dependence on oil (often a major source of their power generation), improving their balance of payments, and bolstering national energy security.’ Currently, 440 reactors with a total capacity of 375 gigawatts (G\Wc) arc in operation worlclwicle.\* As of March 2011, 65 nuclear reactor units, with a total capacity of 63 G\Ve, are under construction.5 As of April 2011, 158 projects are also on order or planned and 326 proposed." These preparations For replacing or expanding reactor ﬂeets Q For new entries to the marketplace follow a decades-long lull in construction suggest a “nuclear renaissance” has begun. \Y/hile “renaissance” implies a revival or return to a better time. the global expansion of nuclear energy in the coming decades will differ in several resects from the way civilian nuclear power developed between the late 1950s mid-19805. First, the scope and pace of this new deployment could be signiﬁcantly larger than in previous periods of expansion: some recent analyses put installed nuclear capacity up at 550—850 G\Ve by 2035. depending on assumptions about the implementation of low-carbon energy policiesf In IEA projections, a 50 per- cent cut in energy-related CO, emissions by 2050 would require global capacity to reach 1,200 G\Ve, a net addition of 30 G\Ve each year over the next forty years.“ To put this ﬁgure into perspective, during the period of nuclear p0wer’s most rapid expansion (1981-90). capacity increased by only 20 G\Ve a year, slowing to an annual average of 4 G\X/e from 1991 to 2006." To achieve large- scale reductions in energy—related CO: emissions, nuclear capacity must there- lore grow not only faster but also For several decades longer than during nuclear energy's previous “golden age." (As the preface indicates, safety concerns arising in the aftermath ofthe Fukushima accident will slow or scale back nuclear power expansion globally in the short term. At the same time, the longer-term impact of Fukushima on global nuclear power expansion will be less adverse, especially in emerging market countries.) Also different today is the number of countries seeking to build their ﬁrst nuclear power reactor. Some sixty-ﬁve countries have expressed interest in or are actively planning for nuclear power."' As the International Atomic Energy Agency (IAEA) points out, however, most of these countries are merely “con- sidering” the range of issues involved in nuclear power development. Many of them cannot realistically afford the large costs associated with civilian nuclear power programs. According to some analyses, countries with a GDP ofless than $50 billion could not spend several billion dollars building a reactor." ln addi- tion, many aspirant countries still lack the electricity grids required For nuclear power: electricity systems with a capacity below l0 G\Ve are unlikely to be able to accommodate a nuclear reactor.“ Some countries could address this issue by expanding electricity interconnections with neighboring states or developing ower export arrangements; however, these alternatives are not widely available in any case would take time to implement. At the same time, a number of countries have credible plans to become new nuclear energy states (NNES). The IAEA has indicated that ten to twenty-ﬁve countries might begin operating their ﬁrst plants by 2030, whereas since Cher- nobyl only thrce—China, Mexico, Romania—havc brought nuclear plants online for the ﬁrst time.” The following list shows the stages of progress of eleven emerging market countries in their ellorts to develop a civilian nuclear energy programz“ —Power reactors under construction: Iran.“ —Contracts signed, legal regulatory infrastructure well developed: United Arab Emirates (UAE), Turkey. —Committed plans, legal Q regulatory infrastructure developing: Vietnam, jordan. —\Well-developed plans but commitment pending: Thailand. Indonesia. Egypt, Kazakhstan. —Developing plans: Saudi Arabia, Malaysia. Emerging market nations entertaining the construction of new nuclear power capacity lace several critical issues. Domestically, each must establish strong institutions and viable regulatory frameworks addressing health, safety, prolif- eration, environmental concerns while ensuring that adequate human ﬁnancial resources are available for these tasks. Even if a state is willing to buy a nuclear reactor on a “turnkey” basis (paying For an outside operator to build Q run the system), it must still train its own nationals in these various respects Q establish a strong academic industrial culture in all aspects of commercial nuclear operations in order to achieve a sound, sustainable program. The NNES will need to build these capabilities in a sufficient timely manner. New States One of the biggest challenges in any expansion of the civilian nuclear sector is that of maintaining and strengthening the global regime for nuclear proliferation. The changing geopolitical J security environment, combined with the political instability of many regions countries that aspire to develop civilian nuclear reactor technology, has already raised proliferation concerns. Nuclear power reactors could become attractive targets for terrorists, who might also seek access to ﬁssile material for radiological dispersal devices (“dirty bombs”) or for nuclear weapons. With such materials more widely available, the proliferation risks could mount. As commercial enrichment and recycling programs multiply, countries may be tempted also to develop latent nuclear weapons capabilities, especially if they aspire to attain regional predominance, international standing, or the capabilities of regional rivals. An expansion of nuclear energy could further tax an already stressed proliferation regime. In light ofArticle IV of the Nuclear Treaty (NPT), wl1icl1 states that the treat shall not aﬁect the “inalienable right . . . to develop research, production duse of nuclear energy For peaceful purposes without discrimination . . . the right to partici ate in, the fullest possible exchange of equipment, materials H scientiﬁc ii technological information For the peaceful uses olinuclear energy, ” some nations are considering acquisition of fuel cycle capabilities as a way to avoid further dependence on foreign suppliers when they develop nuclear power.“ The NPT contains no provisions to restrict acquisition of such capabilities, although members of the Nuclear Suppliers Group (a voluntary group of nations that restricts nuclear exports) have long practiced restraint on technology transfers of sensitive components of the Fuel cycle. A sharp increase in the demand for nuclear fuel could enhance the commercial attractiveness of uranium enrichment reprocessing, enticing new entrants into the market." Nations with large uranium resources might seek to add value to their uranium exports by moving further up the chain of produc- tion or by expanding current capabilities (Australia, Canada, Kazakhstan, South Africa have all discussed this option recently). Even if the high cost of Fuel cycle activities proves to be a disincentive to their development, the NNES— especially in emerging markets—may consider Fuel supply security exercis- ing sovereign rights under Article IV of the NPT more relevant than economic drivers in their decisions about enrichment or reprocessing.“ With governments playing an increasing role in securing and meeting nuclear contracts, political motivations might also enter into assessments of the nuclear capabilities neces- sary for recipient countries. The great danger in the race to build out new capacity is that some new players may not take proliferation concerns as seriously as existing service providers. To address these issues, there has been a reinvigorated discussion of multilat- eral nuclear approaches (MN/\s). M NAs establish a framework to safeguard Arti- cle IV rights, speciﬁcally by limiting the diffusion ofsensitive nuclear materials E technologies while concurrently guaranteeing long-term supply of nuclear fuel to civilian nuclear power programs. Some steps in this direction include two recently approved fuel banks: the Russian-backed lnternational Uranium Enrich- ment Center in Angarsk the ME/\ Nuclear Threat Initiative Fuel Bank.” The institutional challenges to the regime are compounded both by the actions of rogue states such as Iran’s clandestine nuclear program and North Korea’s nuclear weapons testing Q new uranium enrichment pro- gram, Q by non-state activities such as the operations ofblack market nuclear networks arranged by Pakistani scientist A. Khan. Conﬁdence in the regime’s ability to respond to resolve proliferation threats has thus fallen. New technologies may put further stress on the system. Particularly worrying are the expansion of centrifuge technology, commercialization of the laser enrichment process, development and deployment of next-generation reprocessing techniques that require advanced safeguards, and the potential spread of fast reactors. Although the impact of these dynamics is tlifﬁcult to foresee, the proliferation regime needs to keep pace with the rapidly changing, complex nuclear market, especially those developments activities that facilitate the expansion of uranium enrichment and spent fuel reprocessing. This is a major challenge for a regime already under stress.

#### Plan prevents global prolif and solidifies leadership

**Bengelsdorf and McGoldrick**, **07** [currently a Principal with the consulting firm of Bengelsdorf, McGoldrick, and Associates, held numerous senior positions in the U.S. government, including the Energy Department and its predecessor agencies, the State Department, and the U.S. Mission to the IAEA. Among his appointments, he served as the director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs. Throughout his career, Mr. Bengelsdorf contributed significantly to the development and implementation of U.S. international fuel cycle and nonproliferation policies, having participated in several White House and National Security Council studies. He was involved in the negotiation of numerous bilateral and multilateral nuclear and nonproliferation agreements, including the development of full-scope IAEA safeguards (INFCIRC/153) to implement the Nuclear, THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY A White Paper Presented by the American Council on Global Nuclear Competitiveness May 2007, http://www.nuclearcompetitiveness.org/images/COUNCIL\_WHITE\_PAPER\_Final.pdf]

The health of the U.S. civil nuclear infrastructure can have an important bearing in a variety of ways on the ability of the United States to advance its nonproliferation objectives. During the Atoms for Peace Program and until the 1970s, the U.S. was the dominant supplier in the international commercial nuclear power market, and it exercised a strong leadership role in shaping the global nonproliferation regime. In those early days, the U.S. also had what was essentially a monopoly in the nuclear fuel supply market. This capability, among others, allowed the U.S. to promote the widespread acceptance of nonproliferation norms and restraints, including international safeguards and physical protection measures, and, most notably, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The United States concluded agreements for cooperation in peaceful nuclear energy with other states, which require strict safeguards, physical protection and other nonproliferation controls on their civil nuclear programs. Today due to its political, military and economic position in the world, the United States continues to exercise great weight in nonproliferation matters. However, the ability of the United States to promote its nonproliferation objectives through peaceful nuclear cooperation with other countries has declined**.** The fact that no new nuclear power plant orders have been placed in over three decades has led to erosion in the capabilities of the U.S. civil nuclear infrastructure. Moreover, during the same period, the U.S. share of the global nuclear market has declined significantly, and several other countries have launched their own nuclear power programs and have become major international suppliers in their own right. It is highly significant that all but one of the U.S. nuclear power plant vendors and nuclear fuel designers and manufactures for light water reactors have now been acquired by their non-U.S. based competitors. Thus, while the U.S. remains a participant in the international market for commercial nuclear power, it no longer enjoys a dominant role as it did four decades ago. To the extent that U.S. nuclear plant vendors and nuclear fuel designers 2 and manufacturers are able to reassert themselves on a technical and commercial basis, opportunities for U.S. influence with respect to nuclear nonproliferation can be expected to increase. However, the fact that there are other suppliers that can now provide plants and nuclear fuel technology and services on a competitive commercial basis suggests that the U.S. will have to work especially hard to maintain and, in some cases, rebuild its nuclear infrastructure, if it wishes to exercise its influence in international nuclear affairs. The influence of the United States internationally could be **enhanced significantly** if the U.S. is able to achieve success in its Nuclear Power 2010 program and place several new orders in the next decade and beyond. There is a clear upsurge of interest in nuclear power in various parts of the world. As a consequence, if the U.S. aspires to participate in these programs and to shape them in ways that are most conducive to nonproliferation, it will need to promote the health and viability of the American nuclear infrastructure. Perhaps more importantly, if it wishes to exert a positive influence in shaping the nonproliferation policies of other countries, it can do so more effectively by being an active supplier to and partner in the evolution of those programs. Concurrent with the prospective growth in the use of nuclear power, the global nonproliferation regime is facing some direct assaults that are unprecedented in nature. International confidence in the effectiveness of nuclear export controls was shaken by the disclosures of the nuclear operations of A.Q. Khan. These developments underscore the importance of maintaining the greatest integrity and effectiveness of the nuclear export conditions applied by the major suppliers. They also underscore the importance of the U.S. maintaining effective policies to achieve these objectives. **Constructive** U.S. influence will be best achieved to the extent that the U.S. is perceived as a major **technological** leader, supplier and partner in the field of nuclear technology. As the sole superpower, the U.S. will have considerable, on-going influence on the international nonproliferation regime, regardless of how active and successful it is in the nuclear export market. However, the erosion of the U.S. nuclear infrastructure has begun to weaken the ability of the U.S. to participate actively in the international nuclear market. If the U.S. becomes more dependent on foreign nuclear suppliers or if it leaves the international 3 nuclear market to other suppliers, the ability of the U.S. to influence nonproliferation policy will diminish. It is, therefore, essential that the United States have vibrant nuclear reactor, enrichment services, and spent fuel storage and disposal industries that can not only meet the needs of U.S. utilities but will also enable the United States to promote effective safeguards and other nonproliferation controls through close peaceful nuclear cooperation with other countries. U.S. nuclear exports can be used to influence other states’ nuclear programs through the nonproliferation commitments that the U.S. requires. The U.S. has so-called consent rights over the enrichment, reprocessing and alteration in form or content of the nuclear materials that it has provided to other countries, as well as to the nuclear materials that are produced from the nuclear materials and equipment that the U.S. has supplied. Further, the ability of the U.S. to develop improved and advanced nuclear technologies will depend on its ability to provide consistent and vigorous support for nuclear R&D programs that will enjoy solid bipartisan political support in order that they can be sustained from one administration to another. As the U.S. Government expends taxpayer funds on the Nuclear Power 2010 program, the Global Nuclear Energy Partnership, the Generation IV initiative and other programs, it should consider the benefit to the U.S. industrial base and to U.S. non-proliferation posture as criteria in project design and source selection where possible. Finally, the ability of the United States to resolve its own difficulties in managing its spent fuel and nuclear wastes will be crucial to maintaining the **credibility** of the U.S. nuclear power program and will be vital to implementing important new nonproliferation **initiatives** designed to discourage the spread of sensitive nuclear facilities to other countries.

#### US leadership offsets dangerous tech

Ferguson, 10 [Dr. Charles D. Ferguson, President of the Federation of American Scientists, Adjunct Professor in the Security Studies Program at Georgetown University and Adjunct Lecturer in the National Security Studies Program at the Johns Hopkins University, May 19, 2010, Statement before the House Committee on Science and Technology for the hearing on Charting the Course for American Nuclear Technology: Evaluating the Department of Energy’s Nuclear Energy Research and Development Roadmap, <http://www.fas.org/press/_docs/05192010_Testimony_HouseScienceCommHearing%20.pdf>]

\*PHWR = pressurized heavy water reactor

The United States and several other countries have considerable experience in building and operating small and medium power reactors. The U.S. Navy, for example, has used small power reactors since the 1950s to provide propulsion and electrical power for submarines, aircraft carriers, and some other surface warships. China, France, Russia, and the United Kingdom have also developed nuclear powered naval vessels that use small reactors. Notably, Russia has deployed its KLT-40S and similarly designed small power reactors on icebreakers and has in recent years proposed building and selling barges that would carry these types of reactors for use in sea-side communities throughout the world. China has already exported small and medium power reactors. In 1991, China began building a reactor in Pakistan and started constructing a second reactor there in 2005. In the wake of the U.S.-India nuclear deal, Beijing has recently reached agreement with Islamabad to build two additional reactors rated at 650 MWe.2 One of the unintended consequences of more than 30 years of sanctions on India’s nuclear program is that India had concentrated its domestic nuclear industry on building small and medium power reactors based on Canadian pressurized heavy water technology, or Candu-type reactors. Pressurized heavy water reactors (PHWRs) pose proliferation concerns because they can be readily operated in a mode optimal for producing weapons-grade plutonium and can be refueled during power operations. Online refueling makes it exceedingly difficult to determine when refueling is occurring based solely on outside observations, for example, through satellite monitoring of the plant’s operations. Thus, the chances for potential diversion of fissile material increase. This scenario for misuse underscores the need for more frequent inspections of these facilities. But the limited resources of the International Atomic Energy Agency have resulted in a rate of inspections that are too infrequent to detect a diversion of a weapon’s worth of material.3 The opening of the international nuclear market to India may lead to further spread of PHWR technologies to more states. For example, last year, the Nuclear Power Corporation of India, Ltd. (NPCIL) expressed interest in selling PHWRs to Malaysia.4 NPCIL is the only global manufacturer of 220 MWe PHWRs. New Delhi favors South-to-South cooperation; consequently developing states in Southeast Asia, sub-Saharan Africa, and South America could become recipients of these technologies in the coming years to next few decades. Many of these countries would opt for small and medium power reactors because their electrical grids do not presently have the capacity to support large power reactors and they would likely not have the financial ability to purchase large reactors. What are the implications for the United States of Chinese and Indian efforts to sell small and medium power reactors? Because China and India already have the manufacturing and marketing capability for these reactors, the United States faces an economically competitive disadvantage. Because the United States has yet to license such reactors for domestic use, it has placed itself at an additional market disadvantage. By the time the United States has licensed such reactors, China and India as well as other competitors may have established a strong hold on this emerging market. The U.S. Nuclear Regulatory Commission cautioned on December 15, 2008 that the “licensing of new, small modular reactors is not just around the corner. The NRC’s attention and resources now are focused on the large-scale reactors being proposed to serve millions of Americans, rather than smaller devices with both limited power production and possible industrial process applications.” The NRC’s statement further underscored that “examining proposals for radically different technology will likely require an exhaustive review” ... before “such time as there is a formal proposal, the NRC will, as directed by Congress, continue to devote the majority of its resources to addressing the current technology base.”6 Earlier this year, the NRC devoted consideration to presentations on small modular reactors from the Nuclear Energy Institute, the Department of Energy, and the Rural Electric Cooperative Association among other stakeholders.7 At least seven vendors have proposed that their designs receive attention from the NRC.8 Given the differences in design philosophy among these vendors and the fact that none of these designs have penetrated the commercial market, it is too soon to tell which, if any, will emerge as market champions. Nonetheless, because of the early stage in development, the United States has an opportunity to state clearly the criteria for successful use of SMRs. But because of the head start of China and India, the United States should not procrastinate and should take a leadership role in setting the standards for safe, secure, and proliferation-resistant SMRs that can compete in the market. Several years ago, the United States sponsored assessments to determine these criteria.9 While the Platonic ideal for small modular reactors will likely not be realized, it is worth specifying what such an SMR would be. N. W. Brown and J. A. Hasberger of the Lawrence Livermore National Laboratory assessed that reactors in developing countries must: • “achieve reliably safe operation with a minimum of maintenance and supporting infrastructure; • offer economic competitiveness with alternative energy sources available to the candidate sites; • demonstrate significant improvements in proliferation resistance relative to existing reactor systems.”10 Pointing to the available technologies at that time from Argentina, China, and Russia, they determined that “these countries tend to focus on the development of the reactor without integrated considerations of the overall fuel cycle, proliferation, or waste issues.” They emphasized that what is required for successful development of an SMR is “a comprehensive systems approach that considers all aspects of manufacturing, transportation, operation, and ultimate disposal.” Considering proliferation resistance, their preferred approach is to eliminate the need for on-site refueling of the reactor and to provide for waste disposal away from the client country. By eliminating on-site refueling the recipient country would not need to access the reactor core, where plutonium—a weapons-usable material—resides. By removing the reactor core after the end of service life, the recipient country would not have access to fissile material contained in the used fuel. Both of these proposed criteria present technical and political challenges.

#### And, LFTR reactors are key – in situ reprocessing checks fissile diversion

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

\*LFTR = liquid fluoride thorium reactor

IN REPORTING ON THE THORIUM POWER MOVEMENT, I heard plenty of reasons why it would never work. After a year or so I classified them into three categories: market barriers, challenges related to waste and proliferation, and what I came to call the traditionalist argument. The market-based argument is simple: the nuclear power industry has a fuel today that is abundant and inexpensive. Why should it switch to a new, relatively unproven fuel? These assumptions are faulty (uranium may well not be inexpensive and plentiful much longer—see the comments of Srikumar Banerjee, chair of India’s Atomic Energy Commission, from chapter 7). More important, this argument does not take into account the broader costs and risks of uranium-based nuclear power, which have been highlighted by the Fukushima-Daiichi accident. There’s little chance of nuclear power’s fulfilling its promise until those costs are driven down—by shifting to thorium power. The waste and proliferation issues are more complicated, and I will break them down into four elements.“ In distilled form they sum up the objections to thorium from both the nuclear establishment and antinuclear groups. 1. The use of enriched uranium or plutonium in thorium fuel to **ignite the fission** reaction carries proliferation risks, and U-233 is as useful as Pu-239 for making nuclear bombs. This is the central claim of those who dismiss thorium’s prospects for reducing the nuclear waste stream: Solid-fuel thorium reactors produce both U233 (the fissile daughter element of Th232) and plutonium, so what’s the difference? What’s more, thorium reactors require lowenriched uranium or plutonium to initiate the fission reaction, thus creating more material that can be refined into bombs. The kernel of truth here is that the U233 (and thus the plutonium as well) created in the transmutation of thorium is contaminated by U232, one of the nastiest isotopes in the universe. With a half-life of less than 70 years, U-232 decays into the radioisotopes bismuth-212 and thallium-208, which emit intense gamma rays that make it very, very hard to handle and transport (not to mention reprocess) and that would very likely destroy the electronics of any weapon into which they were built. Theoretically, it's possible to make a bomb with U-233, but plutonium is much easier to make and does not come with the problematic U-232. Militaries will always opt for plutonium and U235, because they can't afford to expose their personnel to the deadly risks of U232. As for terrorists, they'd be better off simply buying natural uranium on the open market and finding a way to enrich it. The United States reportedly tested bombs with U-233 cores in the late 1950s, but no country has ever included it as a material as a part of its nuclear weapons program. It's useless even for the most zealous of hypothetical suicide bombers, because they’d probably never reach their target. 2. Most proposed thorium reactors require reprocessing to separate out the U-233 for use in fresh fuel. As with conventional uranium power plants that include reprocessing, bomb-making material is separated out, making it vulnerable to theft or diversion. **This is a tired canard**. Never mind that every nuclear fuel cycle currently in production or contemplated generates “bomb-making material” -- this statement ignores the **realities of weapons building**. Most Gen IV designs described in this chapter involve fuel recycling; indeed, as the Peterson report stated, recycling is critical to the future of nuclear power. To be sure, reprocessing spent fuel rods from a solid fuel thorium reactor is not a simple matter, whether you’re making bombs or new fuel. But it’s important to note that, as with all these arguments, external reprocessing is necessary **only for solid fuel** reactors, not LFTRs. Alone among advanced reactor designs, LFTRs have the capacity to reprocess the fuel **in the reactor** building itself, while the reactor is operating. There’s **no opportunity** for diversion unless you raid the entire plant, shut down the reactor, and figure out a way to separate and abscond with the weaponizable isotopes. Good luck with that. 3. The claim that radioactive waste from thorium reactors creates waste that would have to be isolated from the environment for only 500 years, whereas irradiated uranium-only fuel remains dangerous for hundreds of thousands of years, is false. Thorium-based reactors create long-lived fission products like technetium-99 (its half-life is more than 200,000 years), and thorium- 232 is extremely long lived (its half-life is 14 billion years). This argument ignores the larger context. The volume of fission products from thorium-based solid fuel reactors is about a tenth of that from conventional reactors. What's more, in small amounts, many of these fission products have become common in modern life. Technetium-99, for example, is powerful stuff, worthy of respectful treatment; it’s also commonly used, in a slightly altered form, in medical imaging procedures. Millions of patients ingest it every day without significant risk. The amounts of technetium-99 produced in solid-fuel thorium reactors would be negligible; in LFTRs it would be processed off along with other fission products and largely recycled. Some geological storage will be required, but in general waste from LFTRs decays to safe, stable states within a few hundred years, far less than the millennia required for the by-products of uranium reactors. As for Th-232, it's long lived but safe. The longerlived a radioactive element is, the lower its radioactivity, with its very long half-life, Th-232 is an exceedingly weak producer of radiation. It is so common that it's found in small amounts in virtually all rock, soil, and water. You could sleep with it under your pillow and suffer no ill effects. 4. Reprocessing of thorium fuel cycles has not been successful because uranium-232 is created along with uranium-233. U-232, which has a halflife of about 70 years, is extremely radioactive and is therefore quite dangerous in small quantities. U-232 is indeed extremely radioactive, but its brief half-life means that in less than a century half of it will have decayed to a stable form. Because isotopes decay at a geometric rate (50 percent of half of the original material, or one-quarter of the original, is still radioactive after another 70 years, then one-eighth, one-sixteenth, and so on), the decrease in radioactivity drops off quickly. Many, many hazardous materials are put in storage for centuries. We do not object to them. To summarize, the most common objections to thorium power from the perspective of radioactive waste and the proliferation of nuclear weapons are inflated for solid fuel reactors, and they simply do not apply to LFTRs. That leaves the traditionalist argument, which essentially echoes Milton Shaw and the WASH-1222 report from 1972: It can’t be done because it has never been done before. When I heard this brand of defeatism, it always came from someone with a vested interest in the current nuclear power establishment. I’ll explore the traditionalist argument in more detail in the final pages of this book.

#### Unmitigated tech breakout causes runaway prolif and nuclear war

Sokolski 9 [Henry Sokolski, Executive Director of the Nonproliferation Policy Education Center, 6/1/2009, Avoiding a Nuclear Crowd, http://www.hoover.org/publications/policy-review/article/5534]

Finally, several new nuclear weapons contenders are also likely to emerge in the next two to three decades. Among these might be Japan, North Korea, South Korea, Taiwan, Iran, Algeria, Brazil (which is developing a nuclear submarine and the uranium to fuel it), Argentina, and possibly Saudi Arabia (courtesy of weapons leased to it by Pakistan or China), Egypt, Syria, and Turkey. All of these states have either voiced a desire to acquire nuclear weapons or tried to do so previously and have one or more of the following: A nuclear power program, a large research reactor, or plans to build a large power reactor by 2030. With a large reactor program inevitably comes a large number of foreign nuclear experts (who are exceedingly difficult to track and identify) and extensive training, which is certain to include nuclear fuel making.19 Thus, it will be much more difficult to know when and if a state is acquiring nuclear weapons (covertly or overtly) and far more dangerous nuclear technology and materials will be available to terrorists than would otherwise. Bottom line: As more states bring large reactors on line more will become nuclear-weapons-ready — i.e., they could come within months of acquiring nuclear weapons if they chose to do so.20 As for nuclear safeguards keeping apace, neither the iaea’s nuclear inspection system (even under the most optimal conditions) nor technical trends in nuclear fuel making (e.g., silex laser enrichment, centrifuges, new South African aps enrichment techniques, filtering technology, and crude radiochemistry plants, which are making successful, small, affordable, covert fuel manufacturing even more likely)21 afford much cause for optimism. This brave new nuclear world will stir existing security alliance relations more than it will settle them: In the case of states such as Japan, South Korea, and Turkey, it could prompt key allies to go ballistic or nuclear on their own. Nuclear 1914 At a minimum, such developments will be a departure from whatever stability existed during the Cold War. After World War II, there was a clear subordination of nations to one or another of the two superpowers’ strong alliance systems — the U.S.-led free world and the Russian-Chinese led Communist Bloc. The net effect was relative peace with only small, nonindustrial wars. This alliance tension and system, however, no longer exist. Instead, we now have one superpower, the United States, that is capable of overthrowing small nations unilaterally with conventional arms alone, associated with a relatively weak alliance system ( nato) that includes two European nuclear powers (France and the uk). nato is increasingly integrating its nuclear targeting policies. The U.S. also has retained its security allies in Asia (Japan, Australia, and South Korea) but has seen the emergence of an increasing number of nuclear or nuclear-weapon-armed or -ready states. So far, the U.S. has tried to cope with independent nuclear powers by making them “strategic partners” (e.g., India and Russia), nato nuclear allies (France and the uk), “non-nato allies” (e.g., Israel and Pakistan), and strategic stakeholders (China); or by fudging if a nation actually has attained full nuclear status (e.g., Iran or North Korea, which, we insist, will either not get nuclear weapons or will give them up). In this world, every nuclear power center (our European nuclear nato allies), the U.S., Russia, China, Israel, India, and Pakistan could have significant diplomatic security relations or ties with one another but none of these ties is viewed by Washington (and, one hopes, by no one else) as being as important as the ties between Washington and each of these nuclear-armed entities (see Figure 3). There are limits, however, to what this approach can accomplish. Such a weak alliance system, with its expanding set of loose affiliations, risks becoming analogous to the international system that failed to contain offensive actions prior to World War I. Unlike 1914, there is no power today that can rival the projection of U.S. conventional forces anywhere on the globe. But in a world with an increasing number of nuclear-armed or nuclear-ready states, this may not matter as much as we think. In such a world, the actions of just one or two states or groups that might threaten to disrupt or overthrow a nuclear weapons state could check U.S. influence or ignite a war Washington could have difficulty containing. No amount of military science or tactics could assure that the U.S. could disarm or neutralize such threatening or unstable nuclear states.22 Nor could diplomats or our intelligence services be relied upon to keep up to date on what each of these governments would be likely to do in such a crisis (see graphic below): Combine these proliferation trends with the others noted above and one could easily create the perfect nuclear storm: Small differences between nuclear competitors that would put all actors on edge; an overhang of nuclear materials that could be called upon to break out or significantly ramp up existing nuclear deployments; and a variety of potential new nuclear actors developing weapons options in the wings. In such a setting, the military and nuclear rivalries between states could easily be much more intense than before. Certainly each nuclear state’s military would place an even higher premium than before on being able to weaponize its military and civilian surpluses quickly, to deploy forces that are survivable, and to have forces that can get to their targets and destroy them with high levels of probability. The advanced military states will also be even more inclined to develop and deploy enhanced air and missile defenses and long-range, precision guidance munitions, and to develop a variety of preventative and preemptive war options. Certainly, in such a world, relations between states could become far less stable. Relatively small developments — e.g., Russian support for sympathetic near-abroad provinces; Pakistani-inspired terrorist strikes in India, such as those experienced recently in Mumbai; new Indian flanking activities in Iran near Pakistan; Chinese weapons developments or moves regarding Taiwan; state-sponsored assassination attempts of key figures in the Middle East or South West Asia, etc. — could easily prompt nuclear weapons deployments with “strategic” consequences (arms races, strategic miscues, and even nuclear war). As Herman Kahn once noted, in such a world “every quarrel or difference of opinion may lead to violence of a kind quite different from what is possible today.”23 In short, we may soon see a future that neither the proponents of nuclear abolition, nor their critics, would ever want. None of this, however, is inevitable.

#### Continued prolif ensures global war

Heisbourg 12—chairman of the council of the Geneva Centre for Security Policy and of the London-based International Institute for Strategic Studies (Francois, 3/4/12, “NUCLEAR PROLIFERATION – LOOKING BACK, THINKING AHEAD: HOW BAD WOULD THE FURTHER SPREAD OF NUCLEAR WEAPONS BE?,” http://www.npolicy.org/article\_file/Nuclear\_Proliferation\_-\_Looking\_Back\_Thinking\_Ahead\_How\_Bad\_Would\_the\_Further\_Spread\_of\_Nuclear\_Weapons\_Be.pdf, RBatra)

The problem with this reassuring reading of the past is that it is not entirely true. Yes, the NPT had a major material effect by gradually making non nuclear the new normal. Yes again, defense guarantees by the US weaned Germany, Italy (13), South Korea, Taiwan and even neutral Sweden away from the nuclear road, followed by the US-French-British assurances to post-Soviet Ukraine. Yes too, various levels of coercion worked in Iraq, Libya and Syria. But no, the practice of even the most ‘classical’ bilateral deterrence was not nearly as reassuring as the mainstream narrative inherited from the Cold War would have it. Nor can we consider that our elements for empirical judgment as methodologically satisfactory in terms of their breadth and depth. These two negatives will be examined in turn.

Nuclear archives, as other sensitive governmental archives, open up usually after an interval of decades and even then with varying levels of culling and redaction. Even oral histories tend to follow this pattern, as ageing witnesses feel freer to speak up. Hence a paradox: when the Soviet- American nuclear confrontation was central to our lives and policies during the Cold War, we didn’t how bad things really where; now that we are beginning to know, there is little public interest given the disappearance of the East-West contest. Yet there are lessons of general interest which can be summarized as follows: 1) the Cuban missile crisis brought us much closer to the brink than the acute sense of danger which prevailed at the time, for reasons which are germane to the current situation: massive failures of intelligence on Soviet nuclear preparations and dispositions in Cuba, notably on tactical nukes and on the operational readiness of a number of IRBMs and their warheads; dysfunctional or imperfect command and control arrangements (notably vis à vis Soviet submarines), unintentionally mixed signals on each antagonist’s actions). These are effectively laid out in Michael Dobb’s book, “One Minute to Midnight”(14). 2) the safety and security of nuclear forces are subject to potentially calamitous procedural, technical or operational mishaps and miscalculations, somewhat along the lines of what applies to related endeavors (nuclear power and aerospace). Scott Sagan in his “Limits of Safety”(15) provides compelling research on the American Cold War experience. It would be interesting to have a similar treatment on the Soviet experience…Although it can be argued that today’s nuclear arsenals are much smaller and easier to manage reliable, and that the technology for their control has been vastly improved, several facts remain:

the US has continued to witness serious procedural lapses in the military nuclear arena (16); the de-emphasis of the importance of nuclear weapons in the US force structure is not conducive to treating them with the respect which is due to their destructive power; other nuclear powers do not necessarily benefit from the same technology and learning curves as the older nuclear states, and notably the US; cheek-to-jowl nuclear postures, which prevailed in the Cuban missile crisis and which help explain why World War III nearly occurred, and which characterize India and Pakistan today.

Despite the dearth of detail on Indian and Pakistani nuclear crisis management, we know that the stability of nuclear deterrence between India and Pakistan is by no means a given, with serious risks occurring on several occasions since the mid-1980s(17).

At another level of analysis, we have to recognize the limits of the database on which we ground our policies on nonproliferation. The nuclear age, in terms of operationally usable devices, began in 1945, less than seventy years, less than the age of an old man. The fact that there has been no accidental or deliberate nuclear use during that length of time is nearly twice as reassuring as the fact that it took more than thirty years (18) for a nuclear electricity generating plant to blow up, in the form of the Chernobyl disaster of 1986. But given the destructive potential of nuclear weapons, twice as much reassurance (in the form of no use of nuclear weapons for close to seventy years) is probably not good enough. Furthermore, the Chernobyl disaster involved the same sort of errors of judgment, procedural insufficiencies and crisis-mismanagement visible in Scott Sagan’s book, not only or even mainly, flawed design choices: inadvertence at work, in other words of the sort which could prevail in a time-sensitive, geographically constrained Indo- Pakistani or Middle Eastern conflict. Give it another seventy years to pass judgment?

The same empirical limits apply to the number of actors at play: we have simple bipolar (US-USSR/Russia or India/Pakistan) and complex bipolar (US/France/UK/NATO-Soviet Union/Russia) experience; we’ve had US-Soviet-Chinese or Sino- Indian-Pakistani tripolarity; and we’ve had a number of unipolar moments (one nuclear state vis à vis non-nuclear antagonists). But we mercifully have not had to deal with more complex strategic geometries –yet- in the Middle East or East Asia. We only know what we know, we don’t know what we don’t know.

A historical narrative which is not reassuring and an empirical record that is less than compelling need to inform the manner in which we approach further proliferation.

PROLIFERATION PUSH AND PULL

Ongoing proliferation differs from that of the first halfcentury of the nuclear era in three essential ways: on the demand side, the set of putative nuclear actors is largely focused in the most strategically stressed regions of the world; on the supply side, the actual or potential purveyors of proliferation are no longer principally the first, industrialized, generation of nuclear powers; the technology involved in proliferation is somewhat less demanding than it was during the first nuclear age. Taken together, these changes entail growing risks of nuclear use.

Demand is currently focusing on two regions, the Middle East and East Asia (broadly defined) and involves states and, potentially, non-state actors. In the Middle East, Iran’s nuclear program is the focus of the most intense concerns. A potential consequence in proliferation terms would be to lead regional rivals of Iran to acquire nuclear weapons in term: this concern was vividly in 2007 by the then President of France, Jacques Chirac (19) who specifically mentioned Egypt and Saudi Arabia. The likelihood of such a “proliferation **chain-reaction**” may have been increased by President Obama’s recent repudiation of containment as an option (20): short of Iran being persuaded or forced to abandon its nuclear ambitions, the neighboring states would presumably have to contemplate security options other than a Cold War style US defense guarantee. Given prior attempts by Iraq, Syria and Libya to become nuclear powers, the probability of a multipolar nuclear Middle East has to be rated as high in case Iran is perceived as having acquired a military nuclear capability. Beyond the Middle East, the possibility of civil war in nuclear-armed Pakistan leading to state failure and the possibility of nukes falling out of the hands of an effective central government. There are historical precedents for such a risk, most notably, but not only(21)in the wake of the collapse of the Soviet Union: timely and lasting action by outside powers, such as the US with the Nunn-Lugar initiative, and the successor states themselves has prevented fissile material from falling into unauthorized hands in significant quantities. Pakistan could pose similar problems in a singularly more hostile domestic environment. As things stand, non-state actors, such as post-Soviet mafiya bosses (interested in resale potential) or Al Qaeda (22) have sought, without apparent success, to benefit from opportunities arising from nuclear disorder in the former USSR and Central Asia. Mercifully, the price Al Qaeda was ready to pay was way below the going rate (upwards of hundreds of $million) for the sorts of services provided by the A.Q.Khan network (see below)to some of his clients.

Although North Korea’s nuclear ambitions appear to be both more self-centered and more containable than is the case for Iran, the possibility of state collapse in combination with regional rivalry leave no room for complacency.

More broadly we are facing the prospect of a multipolar nuclear Middle East, linked to an uncertain nuclear Pakistan already part of a nuclear South Asia tied via China to the Korean nexus in which nuclear America and Russia also have a stake. More broadly still, such a nuclear arc-of-crisis from the Mediterranean to the Sea of Japan, would presumably imply the breakdown of the NPT regime, or at least its reversion to the sort of status it had during the Seventies, when many of its currently significant members had not yet joined (23), unloosening both the demand and supply sides of proliferation.

On the supply side, “old style” proliferation relied on official cooperation between first-generation nuclear or nuclearizing powers, of which the Manhattan project was a forerunner (with American, British and Canadian national contributions and multinational scientific teams), followed inter alia by post-1956 French-Israeli, post-1958 US-UK, pre- 1958 USSR-China cooperation. If India relied heavily on the “unwitting cooperation” , notably on the part of Canada and the US involved in the Atoms for Peace CIRUS research reactor, Pakistan set up the first dedicated, broad spectrum, crossborder trading network to make up for the weakness of its limited industrial base. This import-focused organization thus went beyond traditional espionage-aided efforts (as practiced by the USSR during and after the Manhattan project) or case-by-case purloining or diversion of useful material on the global market (as practiced by Israeli operatives). Even before the Pakistani network had fulfilled its primary task of supplying the national program, it began its transformation into an export-oriented venture.

Libya, Iran, North Korea and a fourth country which remains officially unnamed became the main outlets of what became the world’s first private-sector (albeit government originated and ,presumably, supported)proliferation company which was only wound down after strong Western pressure on Pakistan after 9/11. Although the by-now richly documented A.Q.Khan network (24) appears to have ceased to function in its previous incarnation, it has powerfully demonstrated that there is an international market for proliferation which other operators can expect to exploit. Furthermore, budding, resource-weak nuclear powers have a strong incentive to cover the cost of their investment by selling or bartering their nuclear-related assets, including delivery systems. The fruits of state-tostate cooperation between Iran, North Korea and Pakistan are clearly apparent in the close-to-identical genealogy of their nuclear-capable ballistic missiles of the No- Dong/Ghauri/Shahab families displayed in military parades and test launches. Not all such cooperation consists of televised objects.

Even in the absence of game-changing breakthroughs, technical trends facilitate both demand and supply-side proliferation. For the time being, the plutonium route towards the bomb remains essentially as easy and as difficult as from the earliest years of the nuclear era. Provided a country runs a (difficult-to-hide) research or a power reactor from which low-irradiated fuel can be downloaded at will (such as CANDUtype natural uranium reactors), reprocessing is a comparatively straightforward and undemanding task. Forging and machining a multiple-isotope metal which is notorious for its numerous physical states and chemical toxicity is a substantial challenge, with the companion complications of devising a reliable implosion mechanism. Nuclear testing is highly desirable to establish confidence in the end-result. Opportunities for taking the plutonium-proliferation road may increase somewhat as new techniques (such as pyro-processing) come on stream. Developments in the enriched uranium field have been more substantial in facilitating proliferation. The development of lighter and more efficient centrifuges make it easier for a state to extract enriched uranium speedily in smaller and less visible facilities. Dealing with the resulting military-level HEU is a comparatively undemanding task. The long-heralded advent of industrially effective and reliable laser enrichment technology may eventually further increase ease of access. Downstream difficulties would still remain. Although implosion-mechanisms are not mandatory, they are desirable in order both to reduce the critical mass of U235 for a nuclear explosion and to make for a lighter and smaller more-readily deliverable weapons package.

In sum, incremental improvements increase the risk of proliferation. However, non-state actors are not yet, and will not be on the basis of known technical trends, in a position to master the various steps of the two existing military nuclear fuel cycles, which remain the monopoly of states. Nonstate actors would need the active complicity from (or from accomplices within) states, or benefit from the windfall of state collapse, to acquire a military nuclear capability. The threat of nuclear terrorism continues to be subordinated to developments involving state actors, a remark which is not meant to be reassuring since such developments (see above) are increasingly likely as proliferation spreads to new states and as state failure threatens in the ‘arc of proliferation’ extending from the Mediterranean to North-East Asia. Furthermore, non-state actors can be satisfied with levels of nuclear reliability and performance which states could not accept. A difficult-to-deliver or fizzle-prone nuclear device would not provide a state with the level of deterrence needed to shield it from pre-emptive or retaliatory action, whereas a terrorist group would not be seeking such immunity. A road or ship-delivered imperfect device, which would be closer to a radiological bomb than to a fully-fledged atomic weapon would provide its non-state owners with immense potential. The road to a non-state device does not need to be as well-paved.

NUCLEAR FUTURES

‘New’ lessons from a revisited past and current trends in nuclear proliferation, will tie into a number of characteristics of contemporary international relations with potentially destabilizing consequences, leading to an increasing likelihood of nuclear use. Four such characteristics will be singled out here both because of their relevance to nuclear crisis management and because of their growing role in the world system in the age of globalization:

- Strategic upsets

- Limits of imagination

- Unsustainable strains

- Radical aims

The 2008 French Defence and National Security White Paper (25) developed the concept of ‘ruptures stratégiques’ (strategic upsets) to describe the growing tendency of the world system to generate rapid, unexpected, morphing upsets of international security as a consequence of globalization broadly defined against the backdrop of urbanizing populations generating economic growth and environmental and resource constraints. In themselves, such upsets are not novel (see inter alia, a pandemic such as the Black Death in 1348-49, the Great Depression not to mention World Wars or indeed the major and benign strategic upset of 1989-1991) but the very nature of globalization and the relationship between human activity and the Earth’s ability to sustain them) mean more, and more frequent as well as more complex upsets. If this reading is correct –and the Great financial crisis, the Arab revolutions, the accession of China to superpower status can be mentioned as examples which followed the publication of the White paper- ,then the consequences in the nuclear arena will be twofold. First, nuclear doctrines and dispositions which were conceived under a set of circumstances (such as the Cold War or the India-Pakistan balance of power) may rapidly find themselves overtaken by events. For instance it is easier to demonstrate that US and Russian nuclear forces still visibly bear the imprint of their 1950s template than it is to demonstrate their optimal adaptation to post-post-Cold War requirements. Second, more challenges to international security and of a largely unforeseeable nature mean greater strains placed on the ability of nuclear powers to manage crises against the backdrop of their possession of nuclear weapons. In many, indeed most, cases, such ‘ruptures stratégiques’ will no doubt be handled with nuclear weapons appearing as irrelevant: hypothetical security consequences of an epidemic (such as the interhuman transmission of the H5N1 bird flu virus) or prospective conflicts resulting from climate change do not have prima facie nuclear aspects. But beyond the reminder that we don’t know that as a fact, the probability is, under the ‘rupture stratégique’ hypothesis, that there will be more occasions for putting all crisis management, including nuclear, to the test.

Human societies tend to lack the imagination to think through, and to act upon, what have become known as ‘black swan’ events (26): that which has never occurred (or which has happened very rarely and in a wholly different context) is deemed not be in the field of reality, and to which must be added eventualities which are denied because their consequences are to awful to contemplate. The extremes of human misconduct (the incredulity in the face of evidence of the Holocaust, the failure to imagine 9/11) bear testimony to this hard-wired trait of our species. This would not normally warrant mention as a factor of growing salience if not for the recession into time of the original and only use of nuclear weapons in August 1945. Non-use of nuclear weapons may be taken for granted rather than being an absolute taboo. Recent writing on the reputedly limited effects of the Hiroshima and Nagasaki bombs (27) may contribute to such a trend, in the name of reducing the legitimacy of nuclear weapons. Recent (and often compelling) historical accounts of the surrender of the Japanese Empire which downplay the role of the atomic bombings in comparison to early research can produce a similar effect, even if that may not have been the intention (28). However desirable it has been, the end of atmospheric nuclear testing (29) has removed for more than three decades the periodic reminders which such monstrous detonations made as to the uniquely destructive nature of nuclear weapons. There is a real and growing risk that we forget what was obvious to those who first described in 1941 the unique nature of yet-to-be produced nuclear weapons (30). The risk is no doubt higher in those states for which the history of World War II has little relevance and which have not had the will or the opportunity to wrestle at the time or ex post facto with the moral and strategic implications of the nuclear bombing of Japan in 1945.

Unsustainable strains are possibly the single most compelling feature of contemporary proliferation. Tight geographical constraints –with, for instance, New Delhi and Islamabad located within 300 miles of each other-; nuclear multipolarity against the backdrop of multiple, criss-crossing, sources of tension in the Middle East (as opposed to the relative simplicity of the US-Soviet confrontation); the existence of doctrines (such as India’s ‘cold start’) and force postures (such as Pakistan’s broadening array of battlefield nukes) which rest on the expectation of early use; the role of non-state actors as aggravating or triggering factors when they are perceived as operating with the connivance of an antagonist state ( in the past, the assassination of the Austrian Archduke in Sarajevo in 1914; in the future, Hezbollah operatives launching rockets with effect against Israel or Lashkar-e-Taiba commandos doing a ‘Bombay’ redux in India?) : individually or in combination, these factors test crisis management capabilities more severely than anything seen during the Cold War with the partial exception of the Cuban missile crisis. Even the overabundant battlefield nuclear arsenals in Cold War Central Europe, with their iffy weapons’ safety and security arrangements, were less of a challenge: the US and Soviet short-range nuclear weapons so deployed were not putting US and Soviet territory and capitals at risk.

It may be argued that these risk factors are known to potential protagonists and that they therefore will be led to avoid the sort of nuclear brinksmanship which characterized US and Soviet behavior during the Cold War in crises such as the Korean war, Berlin, Cuba or the Yom Kippur war. Unfortunately, the multiple nuclear crises between India and Pakistan demonstrate no such prudence, rather to the contrary. And were such restraint to feed into nuclear policy and crisis planning –along the lines of apparently greater US and Soviet nuclear caution from the mid-Seventies onwards-, the fact would remain that initial intent rarely resists the strains of a complex, multi-actor confrontation between inherently distrustful antagonists. It is also worth reflecting on the fact that during the 1980s, there was real and acute fear in Soviet ruling circles that the West was preparing an out-of-the-blue nuclear strike, a fear which in turn fed into Soviet policies and dispositions (31).

The Cold War was a set of crises and misunderstandings which came within a whisker of a nuclear holocaust; India and Pakistan’s nuclear standoff is deeply unstable not least as a result of the interaction with non-state actors; a multipolar nuclear Middle East would make the Cuban missile crisis look easy in comparison.

Great conflicts tend to occur when one or several of the antagonists views the status quo as sufficiently undesirable and/or unsustainable to prompt forceful pro-action. Notwithstanding widespread perceptions to the contrary, this was not the case of the USSR and the United States during the Cold War. The US had chosen a policy of containment, as opposed to roll-back, of the Soviet Empire within its limits established as a result of World War II. The Soviet Union seized targets of opportunity outside of its 1945 area of control but avoided direct confrontation with US forces. Messianic language from the USSR on the global victory of communism or from the US about the end of the Evil Empire did not take precedence over the prime Soviet concern of preserving the Warsaw Pact and the US pursuit of containment – and, no less crucially, their mutual confidence that they could achieve these aims without going to war one with the other.

No such generalization can be made about the Middle East, a region in which the very existence of a key state (Israel) is challenged while others have gone to war with each other (e.G.Iran-Iraq war, the Gulf War of 1990-1991), or are riven by deep internal conflicts. Actors such as Hezbollah, with its organic and functional links with Islamic Iran and Alawite Syria add to the complexities and dangers. Extreme views and actions vis à vis the strategic status quo are widely prevalent. Although the India-Pakistan relationship corresponds to something akin to the US-Soviet ‘adversarial partnership’, that does not apply to radical non-state actors prevalent in Pakistan with more or less tight links to that country’s military intelligence services (ISI, Inter-Services Intelligence). The potential for danger is compounded by the variety of such groups: the Pashtu-related Pakistani Taliban (TTP), Kashmiri-related groups, Jihadi militants from the core provinces of Punjab and Sind… Their common characteristics are extreme radicalism, high levels of operational proficiency, and shared enmity of India. Their potential for triggering a conflict between the two countries is substantial, above and beyond the intentions of government officials.

#### Federal action is key to reverse industry decline and influence reactor adoption

Wallace and Williams, 12 [Michael, Senior Adviser, U.S. Nuclear Energy Project, Sarah, CSIS, “Nuclear Energy in America: Preventing It’s Early Demise,” http://csis.org/files/publication/120417\_gf\_wallace\_williams.pdf]

America’s nuclear energy industry is in decline. Low natural gas prices, financing hurdles, new safety and security requirements, failure to resolve the waste issue and other factors are hastening the day when existing reactors become uneconomic, making it virtually impossible to build new ones. Two generations after the United States took this wholly new and highly sophisticated technology from laboratory experiment to successful commercialization, our nation is in danger of losing an industry of unique strategic importance, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future. The pace of this decline, moreover, could be more rapid than most policymakers and stakeholders anticipate. With 104 operating reactors and the world’s largest base of installed nuclear capacity, it has been widely assumed that the United States—even without building many new plants—would continue to have a large presence in this industry for some decades to come, especially if existing units receive further license extensions. Instead, current market conditions are such that growing numbers of these units are operating on small or even negative profit margins and could be retired early. Our nation is in danger of losing an industry of **unique** strategic **importance**, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future.60 | Center for Strategic and International Studies Meanwhile, China, India, Russia, and other **countries are looking to** significantly expand their nuclear energy commitments. By 2016, China could have 50 nuclear power plants in operation, compared with only 14 in 2011. India could add 8 new plants and Russia 10 in the same time frame. These trends are expected to accelerate out to 2030, by which time China, India, and Russia could account for nearly 40 percent of global nuclear generating capacity. Meanwhile, several smaller nations, mostly in Asia and the Middle East, are planning to get into the nuclear energy business for the first time. In all, as many as 15 new nations could have this technology within the next two decades. Meanwhile, America’s share of global nuclear generation is expected to shrink, from about 25 percent today to about 14 percent in 2030, and—if current trends continue—to less than 10 percent by mid-century. **With the center of gravity** for global nuclear investment **shifting** to a new set of players, the United States and the international community face a difficult set of challenges: stemming the **spread of nuclear weapons-**usable materials and know-how; preventing **further catastrophic nuclear accidents**; providing for safe, long-term nuclear waste management; and protecting U.S. energy security and economic competitiveness. **In this context, federal action** to reverse the American nuclear industry’s impending decline is a national security imperative. The United States cannot afford to become irrelevant in a new nuclear age. Our nation’s commercial nuclear industry, its military nuclear capabilities, and its strong regulatory institutions can be seen as three legs of a stool. All three legs are needed to support America’s future prosperity and security and to shape an international environment that is conducive to our long-term interests. Three specific aspects of U.S. leadership are particularly important. First, managing the national and global security risks associated with the spread of nuclear technology to countries that don’t necessarily share the same perspective on issues of nonproliferation and nuclear security or may lack the resources to implement effective SHARE OF NET GLOBAL NUCLEAR GENERATION 1980-2030 Source: Energy Information Agency (EIA) databaseGlobal Forecast 2012 | 61 safeguards in this area. An approach that relies on influence and involvement through a viable domestic industry is likely to be **more effective** and less expensive than trying to contain these risks militarily. Second, **setting global norms** and standards for safety, security, operations, and emergency response. As the world learned with past nuclear accidents and more recently with Fukushima, a major accident anywhere can have lasting repercussions everywhere. As with nonproliferation and security, **America’s ability to exert leadership** and influence in this area is directly linked to the strength of our domestic industry and our active involvement in the global nuclear enterprise. A strong domestic civilian industry and regulatory structure have immediate national security significance in that they help support the nuclear capabilities of the U.S. Navy, national laboratories, weapons complex, and research institutions. Third, in the past, the U.S. government could exert influence by striking export agreements with countries whose regulatory and legal frameworks reflected and were consistent with our own nonproliferation standards and commitments. At the same time, our nation set the global standard for effective, independent safety regulation (in the form of the Nuclear Regulatory Commission), led international efforts to reduce proliferation risks (through the 1970 NPT Treaty and other initiatives), and provided a model for industry self-regulation. The results were not perfect, but America’s institutional support for global nonproliferation goals and the regulatory behaviors it modeled clearly helped shape the way nuclear technology was adopted and used elsewhere around the world. This influence seems certain to wane if the United States is no longer a major supplier or user of nuclear technology. With existing nonproliferation and safety and security regimes looking increasingly inadequate in this rapidly changing global nuclear landscape, American leadership and leverage is more important and more central to our national security interests than ever. To maintain its leadership role in the development, design, and operation of a growing global nuclear energy infrastructure, the next administration, whether Democrat or Republican, must recognize the invaluable role played by the commercial U.S. nuclear industry and take action to prevent its early demise.

#### Thorium is key – spurs elimination of plutonium stockpiles

Donohue, 8/27/12 [Nathan Donohue is a research intern for the Project on Nuclear Issues, CSIS, “Thorium and its Value in Nonproliferation”, <http://csis.org/blog/thorium-and-its-value-nonproliferation>]

The Federation of American Scientists (FAS) recently featured an article on their Science Wonk blog entitled “What about thorium?” As the article discussed, thorium is an element, which like uranium, has the ability to be utilized to produce nuclear power. More importantly, thorium fueled reactors are reported to be more proliferation resistant than uranium fueled reactors. However, despite these assertions, thorium has almost universally been ignored in favor of uranium based nuclear power reactors. The purpose of this piece is to conduct a review of thorium and to develop a better understanding of thorium’s nonproliferation benefits as it relates to nuclear power production. As FAS notes, natural thorium is a fertile material, while not itself fissionable, can be converted into a fissile material suitable to sustain a nuclear fission chain reaction. Accordingly, when natural thorium captures neutrons it becomes a new isotope of thorium which then goes through a process of decay where over a period of weeks, the thorium actually turns into uranium in the form of U-233. Unlike natural thorium, this U-233 is a fissile material suitable to sustain a nuclear fission chain reaction. The use of thorium to produce nuclear power is not a new concept. Research into thorium began in the late 1950’s and in 1965, Alvin Weinberg, the head of the Oak Ridge National Laboratory, and his team [built](http://www.wired.com/magazine/2009/12/ff_new_nukes/) a working thorium reactor using a molten salt bath design. Thorium was used to power one of the first commercial nuclear power plants in the U.S. in Shippingport, Pennsylvania in 1977. Nevertheless, research into thorium never found a foothold in the U.S. nuclear power infrastructure. By 1973, thorium research and development was fading to the uranium based focus of the U.S. nuclear industry, which was in the process of developing 41 new nuclear plants, all of which used uranium. The Shippingport facility was one of the last vestiges of thorium research in the U.S. for decades. Recently there has been a renewed focus on thorium based nuclear power, specifically in regards to the benefits related to spent fuel, [including](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) research involving the European Commission, India, Canada, Slovakia, the Russian Federation, China, France and the Republic of Korea. The utilization of thorium is purported to have the ability to reduce spent fuel waste by upwards of 50% while at the same time reducing the amount of plutonium within the fuel. To that end, thorium fuel designs are regarded as a better alternative for power production in terms of the plutonium proliferation risk inherent in spent fuel from uranium-fueled reactors. For example, all 104 reactors in the U.S. use uranium fuel. In these reactors, when the uranium in the form of U-238 captures extra neutrons, it goes through a process of decay whereby plutonium in the form of Pu-239 is produced. The spent fuel can then be reprocessed to isolate and remove this plutonium, which can then be used in the core of a nuclear weapon. Roughly 13 kilograms (kg) of reactor grade plutonium is necessary to power a nuclear weapon. In total, these 104 U.S. reactors accumulate roughly 2,000 tons of spent fuel per year. The 2,000 tons of waste produced annually by these nuclear utilities, contains roughly [25,520](http://www.fas.org/rlg/980826-pu.htm) kg of plutonium or enough plutonium to build 1,963 nuclear weapons a year. Globally, the total world generation of reactor-grade plutonium in spent fuel is equal to roughly 70 tons annually; more than two times what the U.S. produces. Conversely, there is the thorium seed and blanket design. This reactor [concept](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is based on a design comprised of inner seed rods of uranium which provide neutrons to an outer blanket of thorium-uranium dioxide rods, creating U-233, which in turn powers the nuclear reactor. The important difference with this design is in the nature of the spent fuel. As advocates of thorium such as the U.S. company Lightbridge purport, this process would realize a significant reduction in the “quantity and quality” of plutonium produced within the spent fuel, achieving upwards of an 80% reduction in plutonium. For [example](http://www.americanscientist.org/issues/feature/2003/5/thorium-fuel-for-nuclear-energy/5.), “a thorium-fueled reactor …would produce a total of 92 kilograms of plutonium per gigawatt-year of electricity generated, whereas a conventional water-cooled reactor would result in 232 kilograms.” In addition to a lower percentage of plutonium in the spent fuel, the composition of the plutonium produced is different as well, featuring a higher content of the plutonium isotopes Pu-238, Pu-240, and Pu-242. Weapons-grade plutonium requires roughly 90% plutonium in the form of Pu-239. Plutonium with higher contents of Pu-238 and Pu-240 is inherently unpredictable, and can spontaneously fission, making it “difficult or impossible to compress a bomb core containing several kilograms of plutonium to supercriticality before the bomb [disassembles] with a greatly reduced yield.” This reduces the reliability of a given nuclear weapon, **thus making the thorium process less suitable for the development of plutonium for a nuclear weapon.** The International Atomic Energy Agency [considers](http://hdl.handle.net/1721.1/29956) plutonium containing more than 81% Pu-238 “not weapons-usable.” Although thorium offers the ability to reduce the plutonium risk inherent in spent fuel, it does not eliminate the need for enriched uranium. Specifically, Lightbridge’s seed and blanket fuel technology would require uranium enriched to less than 20 % in both the seed and blanket fuel rods. Equally significant, the U-233 that is produced in the seed and blanket design poses its own proliferation concern. A nuclear weapon can be constructed with a significant quantity of U-233, which the IAEA defines as [**8**](http://moltensalt.org/references/static/downloads/pdf/ORNL-6952.pdf) **kg of U-233**, and both the U.S. and India have detonated nuclear devices which utilized U-233. At the same time though, U-233 produced through this design also contains a small amount of the uranium isotope U-232, which emits a powerful, highly penetrating gamma ray. As [noted](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) by Ray Sollychin, the Executive Director of the Neopanora Institute-Network of Energy Technologies, this reportedly makes “U233 weapons significantly more difficult to conceal and much more dangerous to handle.” In addition, reactors which use a thorium based seed and blanket design are engineered so that the U-233 which is produced is simultaneously denatured or blended with U-238, further reducing its suitability for a nuclear weapon. Moreover, the blanket is designed to remain within the reactor for upwards of nine to twelve years. This allows for the U-233 that is produced within the blanket to burn “in situ.” Lastly, any attempt to prematurely remove the blanket and separate the U-233 from the U-238, U-234 and U-236 isotopes [will](http://hdl.handle.net/1721.1/29956) also “remove the fissile U-235 from the resulting enriched steam,” once again making it unsuitable for a nuclear weapon. From this brief review of thorium and its properties, it appears clear that from a proliferation standpoint, that thorium fueled reactors provide for a safer nuclear power production process. In fact, it begs the question why thorium was overlooked in the first place. The simple answer is that the U.S. nuclear infrastructure was originally designed to facilitate mass quantities of plutonium for the production of a nuclear weapons arsenal. According to an article by Richard Martin in Wired magazine, “Locked in a struggle with a nuclear- armed Soviet Union, the U.S. government in the 60’s chose to build uranium-fueled reactors — in part because they produce plutonium that can be refined into weapons-grade material.” During the Cold War, maintaining nuclear parity with the Soviets was an overarching goal. Yet, with the end of the Cold War, the focus has shifted from acquiring nuclear weapons to stymying their development by both state and non-state actors. Therefore, the plutonium byproduct of the global nuclear power infrastructure has now become a liability and a proliferation risk. As the IAEA has [noted](http://www-pub.iaea.org/mtcd/publications/pdf/te_1450_web.pdf), “for nuclear power to be accepted as a significant contributor of primary energy in the next century, it should be based on a fuel cycle, which is highly proliferation-resistant.” For this reason, further **research and development of thorium** needs to be explored, not only in terms of seed and blanket technology but other thorium based designs as well, including thorium-based Pebble Bed Reactor, fast reactors (liquid metal cooled and gas cooled); and advanced designs such as Molten Salt Reactor and Accelerator Driven System.

#### And, in-situ reprocessing removes plutonium – solves extinction from terrorism

Rhodes, 12 [February, Professor Chris Rhodes is a writer and researcher. He studied chemistry at Sussex University, earning both a B.Sc and a Doctoral degree (D.Phil.); rising to become the youngest professor of physical chemistry in the U.K. at the age of 34. A prolific author, Chris has published more than 400 research and popular science articles (some in national newspapers: The Independent and The Daily Telegraph) He has recently published his first novel, "University Shambles" was published in April 2009 (Melrose Books), “Hopes Build for Thorium Nuclear Energy”, <http://oilprice.com/Alternative-Energy/Nuclear-Power/Hopes-Build-for-Thorium-Nuclear-Energy.html>]

There is much written to the effect that thorium might prove a more viable nuclear fuel, and an energy industry based upon it, than the current uranium-based process which serves to provide both energy and weapons - including "depleted uranium" for armaments and missiles. There are different ways in which energy might be extracted from thorium, one of which is the accelerator-driven system (ADS). Such accelerators need massive amounts of electricity to run them, as all particle accelerators do, but these are required to produce a beam of protons of such intensity that until 10 years ago the prevailing technology meant that it could not have been done. As noted below, an alternative means to use thorium as a fuel is in a liquid fluoride reactor (LFR), also termed a molten salt reactor, which avoids the use of solid oxide nuclear fuels. Indeed, China has made the decision to develop an LFR-based thorium-power programme, to be active by 2020.¶ Rather like nuclear fusion, the working ADS technology is some way off, and may never happen, although Professor Egil Lillestol of Bergen University in Norway is pushing that the world should use thorium in such ADS reactors. Using thorium as a nuclear fuel is a laudable idea, as is amply demonstrated in the blog "Energy from Thorium" (http://thoriumenergy.blogspot.com/). However, the European Union has pulled the plug on funding for the thorium ADS programme, which was directed by Professor Carlo Rubbia, the Nobel Prize winner, who has now abandoned his efforts to press forward the programme, and instead concentrated on solar energy, which was another of his activities. Rubbia had appointed Lillestol as leader of the CERN physics division over two decades ago, in 1989, who believes that the cause is not lost.¶ Thorium has many advantages, not the least being its greater abundance than uranium. It is often quoted that there is three times as much thorium as there is uranium. Uranium is around 2 - 3 parts per million in abundance in most soils, and this proportion rises especially where phosphate rocks are present, to anywhere between 50 and 1000 ppm. This is still only in the range 0.005% - 0.1% and so even the best soils are not obvious places to look for uranium. However, somewhere around 6 ppm as an average for thorium in the Earth's crust is a reasonable estimate. There are thorium mineral deposits that contain up to 12% of the element, located at the following tonnages in Turkey (380,000), Australia (300,000), India (290,000), Canada and the US combined (260,000)... and Norway (170,000), perhaps explaining part of Lillestol's enthusiasm for thorium based nuclear power. Indeed, Norway is very well endowed with natural fuel resources, including gas, oil, coal, and it would appear, thorium.¶ An alternative technology to the ADS is the "Liquid Fluoride Reactor" (LFR), which is described and discussed in considerable detail on the <http://thoriumenergy.blogspot.com/> blog, and reading this has convinced me that the LFR may provide the best means to achieve our future nuclear energy programme. Thorium exists naturally as thorium-232, which is not of itself a viable nuclear fuel. However, by absorption of relatively low energy "slow" neutrons, it is converted to protactinium 233, which must be removed from the reactor (otherwise it absorbs another neutron and becomes protactinium 234) and allowed to decay over about 28 days to uranium 233, which is fissile, and can be returned to the reactor as a fuel, and to breed more uranium 233 from thorium. The "breeding" cycle can be kicked-off using plutonium say, to provide the initial supply of neutrons, and indeed the LFR would be a useful way of disposing of weapons grade plutonium and uranium from the world's stockpiles while converting it into useful energy.¶ The LFR makes **in-situ reprocessing possible**, much more easily than is the case for solid-fuel based reactors. I believe there have been two working LFR's to date, and if implemented, the technology would avoid using uranium-plutonium fast breeder reactors, which need high energy "fast" neutrons to convert uranium 238 which is not fissile to plutonium 239 which is. The LFR is inherently safer and **does not require liquid sodium** as a coolant, while it also **avoids the risk of plutonium getting into the hands of terrorists**. It is worth noting that while uranium 235 and plutonium 239 could be shielded to avoid detection as a "bomb in a suitcase", uranium 233 could not, because it is always contaminated with uranium 232, which is a strong gamma-ray emitter, and is far less easily concealed.¶ It has been claimed that thorium produces "250 times more energy per unit of weight" than uranium. Now this isn't simply a "logs versus coal on the fire" kind of argument, but presumably refers to the fact that while essentially all the thorium can be used as a fuel, the uranium must be enriched in uranium 235, the rest being "thrown away" and hence wasted as "depleted" uranium 238 (unless it is bred into plutonium). If both the thorium and uranium were used to breed uranium 233 or plutonium 239, then presumably their relative "heat output" weight for weight should be about the same as final fission fuels? If this is wrong, will someone please explain this to me as I should be interested to know?¶ However, allowing that the LFR in-situ reprocessing is a far easier and less dangerous procedure, the simple sums are that contained in 248 million tonnes of natural uranium, available as a reserve, are 1.79 million tonnes of uranium 235 + 246.2 million tonnes of uranium 238. Hence by enrichment 35 million tonnes (Mt) of uranium containing 3.2% uranium 235 (from the original 0.71%) are obtained. This "enriched fraction" would contain 1.12 Mt of (235) + 33.88 Mt of (238), leaving in the other "depleted" fraction 248 - 35 Mt = 213 Mt of the original 248 Mt, and containing 0.67 Mt (235) + 212.3 Mt (238). Thus we have accessed 1.79 - 0.67 = 1.12 Mt of (235) = 1.12/224 = 4.52 x 10\*-3 or 0.452% of the original total uranium. Thus on a relative basis thorium (assuming 100% of it can be used) is 100/0.452 = 221 times as good weight for weight, which is close to the figure claimed, and a small variation in enrichment to a slightly higher level as is sometimes done probably would get us to an advantage factor of 250!¶ Plutonium is a by-product of normal operation of a uranium-fuelled fission reactor. 95 to 97% of the fuel in the reactor is uranium 238. Some of this uranium is converted to plutonium 239 and plutonium 241 - usually about 1000 kg forms after a year of operation. At the end of the cycle (a year to 2 years, typically), very little uranium 235 is left and about 30% of the power produced by the reactor actually comes from plutonium. Hence a degree of "breeding" happens intrinsically and so the practical advantage of uranium raises its head from 1/250 (accepting that figure) to 1/192, which still weighs enormously in favour of thorium!¶ As a rough estimate, 1.4 million tonnes of thorium (about one third the world uranium claimed, which is enough to last another 50 years as a fission fuel) would keep us going for about 200/3 x 50 = 3,333 years. Even if we were to produce all the world's electricity from nuclear that is currently produced using fossil fuels (which would certainly cut our CO2 emissions), we would be O.K. for 3,333/4 = 833 years. More thorium would doubtless be found if it were looked for, and so the basic raw material is not at issue. Being more abundant in most deposits than uranium, its extraction would place less pressure on other fossil fuel resources used for mining and extracting it. Indeed, thorium-electricity could be piped in for that purpose.¶ It all sounds great: however, the infrastructure would be huge to switch over entirely to thorium, as it would to switch to anything else including hydrogen and biofuels. It is this that is the huge mountain of resistance there will be to all kinds of new technology. My belief is that through cuts in energy use following post peak oil (and peak gas), we may be able to produce liquid fuels from coal, possibly using electricity produced from thorium, Thorium produces less of a nuclear waste problem finally, since fewer actinides result from the thorium fuel cycle than that from uranium. Renewables should be implemented wherever possible too, in the final energy mix that will be the fulcrum on which the survival of human civilization is poised.

#### And, dual use makes other reactors too risky – federal investment streamlines tech transfers

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Advanced nuclear power must be proliferation resistant. Nuclear weapons can cause terrible destruction of whole cities and contaminate entire regions, so expansion of nuclear power must come with assurances that the risk of proliferation of nuclear weapons is not increased. The technology for making such weapons is widely known, although the process is difficult and expensive. Building commercial nuclear power plants has not led to weapons development; nations that have nuclear weapons have developed them with purposeful programs and facilities. However dual-use technologies such as centrifuge enrichment of U-235 that can make fuel for PWRs can be adapted to make highly enriched uranium for weapons. After President Eisenhower’s Atoms for Peace speech the US helped nations to acquire the knowledge and materials to use nuclear technology for peaceful purposes. Unexpectedly this knowledge led India to develop nuclear weapons instead. Selling advanced nuclear power plants worldwide does not require providing each nation with the technical skills and materials to build nuclear power plants or nuclear weapons. Consider the airplane and jet engine industry: nations want prestigious national airlines. Fully 83 countries, from Algeria to Yemen, operate airlines using the Boeing 747 airliner, yet these nations do not have their own airframe or engine production or maintenance capabilities. General Electric makes a business of maintaining and overhauling engines at GE’s own service centers. This is a technology-transfer-resistant model suitable for LFTR installation and maintenance. The liquid fluoride thorium reactor is proliferation resistant. LFTR requires fissile material to be transported to the site for startup, but not thereafter. LFTR then creates and burns fissile U-233 that conceivably could be used instead for a nuclear weapon. Would this ever happen? China, USA, Russia, India, UK, France, Pakistan, and Israel, which account for 57% of global CO2 emissions, already have nuclear weapons and no incentive to subvert LFTR technology. So just implementing LFTRs in these nations would be a big step in addressing global warming. Many additional nations, such as Canada, Japan, and South Africa, have the capability to build nuclear weapons but have chosen not to, so there is no incentive for them to subvert LFTR technology for this purpose. Should LFTRs be implemented in other non-weapons states? Certainly terrorists could not steal this uranium dissolved in a molten salt solution along with even more radioactive fission products inside a sealed reactor. IAEA safeguards include physical security, accounting and control of all nuclear materials, surveillance to detect tampering, and intrusive inspections. LFTR’s neutron economy contributes to securing its inventory of nuclear materials. Neutron absorption by uranium-233 produces about 2.4 neutrons per fission—one to drive a subsequent fission and another to drive the conversion of Th-232 to U-233 in the blanket molten salt. Taking into account neutron losses from capture by protactinium and other nuclei, a well-designed LFTR reactor will direct just about 1.00 neutrons per fission to thorium transmutation. This delicate balance doesn’t create excess U-233, just enough to generate fuel indefinitely. If this conversion ratio could be increased to 1.01, a 100 MW LFTR might generate kilogram of excess U-233 per year. If meaningful quantities of uranium-233 are misdirected for non-peaceful purposes, the reactor will report the diversion by stopping because of insufficient U-233 to maintain a chain reaction. Yet a sovereign nation or revolutionary group might expel IAEA observers, stop the LFTR, and attempt to remove the U-233 for weapons. Accomplishing this would require that skilled engineers, working in a radioactive environment, modify the reactor's fluorination equipment to separate uranium from the fuel salt instead of the thorium blanket salt. What would happen to them? The neutrons that produce U-233 also produce contaminating U-232, whose decay products emit 2.6 MeV penetrating gamma radiation, hazardous to weapons builders and obvious to detection monitors. The U-232 decays via a cascade of elements to thallium- 208, which builds up and emits the radiation. Depending on design specifics, the proportion of U-232 would be about 0.13% for a commercial power reactor. A year after separation, a weapons worker one meter from a subcritical 5 kg sphere of such U-233 would receive a radiation dose of 43 mSv/hr, compared to 0.003 mSv/hr from plutonium, even less from U-235. Death becomes probable after 72 hours exposure. After ten years this radiation triples. A resulting weapons would be highly radioactive and therefore dangerous to military workers nearby. The penetrating 2.6 MeV gamma radiation is an easily detected marker revealing the presence of such U-233, possibly even from a satellite. U-232 can not be removed chemically, and centrifuge separation from U-233 would make the centrifuges too radioactive to maintain. Conceivably, nuclear experts might try to stop the reactor, chemically extract the uranium, and devise chemistry to remove the intermediate elements of the U-232 decay chain before the thallium is formed, except that the isotopes are continually replaced by U-232 decay. They might try to quickly separate the small amount of Pa-233 from the uranium and let it decay to pure U-233, but they would have to design and build a special chemical plant within the radioactive reactor. Bomb-makers might attempt quickly fabricate a weapon from newly separated U-233 before radiation hazards become lethal; even so there will be sufficient U-232 contamination that penetrating 2.6 MeV gamma rays will be readily detected. The challenge of developing and perfecting such new processes will be more difficult and expensive than creating a purpose-built weapons factory with known technology, such as centrifuge enrichment of U-235 conducted in Iran or PUREX for extracting plutonium from solid fuel irradiated in LWRs. Bruce Hoglund wrote a fuller report of the challenges to would-be bomb makers, and there is a discussion in the comments of the energy from thorium blog, both linked in the references section. A LFTR operating under IAEA safeguards might additionally be protected by injecting U-238 from a remotely controlled tank of U-238. The U-238 would dilute (denature) the U-233 to make it useless for weapons, but it would also stop the reactor and ruin the fuel salt for further use. For personnel safety, any U-233 material operations must be accomplished by remote handling equipment within a radioactively shielded hot cell. This can be designed to make it very hard for any insiders or outsiders to remove material from the hot cell. Another hurdle for the would-be pilferer uranium from 700° C molten salt is the retained radioactive fission products. Even with a l-hour cooling period to allow decay of the short-lived isotopes, the salt still releases ~350 W/liter of heat. That heat comes from deadly ionizing radiation that would kill a nearby pilferer in minutes unless shielded by meters of concrete or water or heavy lead. This fission product radiation is the same self protection that protects spent LWR fuel from theft. The single-fluid DMSR is highly proliferation resistant. The DMSR contains enough U-238 mixed with fissile U-233 and U-235 that the uranium can not sustain the rapid fission reaction necessary for a nuclear weapon. Uranium enriched to less than 20% U-235 is termed LEU, low-enriched uranium. The LEU fuel is not suitable for a nuclear weapon, which typically requires over 90% U-235. The DMSR with at least 80% U-238 is said to be denatured with it. The DMSR has less chemical processing equipment than the two- fluid LFTR, which uses fluorine chemistry to direct U-233 generated in the thorium blanket to the core. The DMSR has no chemical processing equipment in the reactor plant that might somehow be modified to divert U-233 for a weapons program. Because of the substantial amount of U-238 in the DMSR, it does breed plutonium from neutron capture, just as does a standard LWR. Some Pu-239 fissions. However the fissile Pu-239 isotope that might be desired for a weapon is only 31% of the plutonium, mixed with other isotopes (Pu-238, 240, 241, 242) that make the plutonium unsuitable for a weapon. Because the plutonium is dissolved in the fuel salt, there is no opportunity to remove it early to obtain weapons grade Pu-239 before neutrons convert it to other isotopes, as in a LWR, CANDU, RBMK, or military plutonium production reactor. Further, plutonium’s chemistry makes it difficult to remove from the salt. Also, the salt contains highly radioactive fission products as well as U-232, whose decay daughters emit a penetrating 2.6 MeV gamma ray. DMSR is the most proliferation-resistant nuclear reactor. There are easier paths than U-233 to make nuclear weapons. Pakistan has illustrated how a developing nation can make uranium weapons using centrifuge enrichment; in a dual path it simultaneously developed the methods to extract weapons grade plutonium from uranium reactors. India and North Korea developed plutonium weapons from heavy water or graphite moderated reactors with online fuel exchange capability. Iran has built centrifuge enrichment plants capable of making highly enriched U-235 for nuclear weapons. These proven weapons paths eliminate the incentive for nations to try to develop nuclear weapons via the technically challenging and expensive U-233 path. Only a determined, well-funded effort on the scale of a national program could overcome the obstacles to illicit use of uranium- 232/233 produced in a LFTR reactor. Such an effort would certainly find that it was less problematic to pursue the enrichment of natural uranium or the breeding of plutonium. LFTR reduces existing weapons proliferation risks. Deploying LFTRs on a global scale will not increase the risk of nuclear weapons proliferation, but rather decrease it. Starting up LFTRs with existing plutonium can **consume inventories** of this weapons-capable material. The thorium-uranium fuel cycle reduces demand for U-235 enrichment plants, which can make weapons material nearly as easily as power reactor fuel. Abundant energy cheaper than coal can increase prosperity and enable lifestyles that lead to sustainable populations, reducing the potential for wars over resources.

### 1ac lftr

#### Advantage two is the LFTR

#### Only LFTR expansion solves water desal as well as technetium and Rhodium shortages

Sorenson, 09 [Kirk, Co-founder and Chief Technologist at Flibe Energy, chief nuclear technologist at [Teledyne Brown Engineering](http://www.linkedin.com/company/teledyne-brown-engineering?trk=ppro_cprof) aerospace engineer at NASA, University of Tennessee-Knoxville, Georgia Institute of Technology, Utah State University, <http://energyfromthorium.com/lftradsrisks.html>]

Some of the many advantages of the LFTR system over other nuclear reactor designs are outlined below. While LWRs can produce U233 from thorium, they will not provide the various advantages outlined below, because of their use of thorium in solid form. It is the unique combination of the thorium cycle and the liquid fluoride reactor that grants **all of the following advantages only from the LFTR** system.¶ ¶ Safety--LFTRs are designed to take advantage of the physics of the thorium cycle for optimum safety. The fluid in the core is not pressurized, thus eliminating the driving force of radiation release in conventional approaches. The LFTR reactor cannot melt down because of a runaway reaction or other nuclear reactivity accidents (such as at Chernobyl), because any increase in the reactor's operating temperature results in a reduction of reactor power, thus stabilizing the reactor without the need for human intervention. Further, the reactor is designed with a salt plug drain in the bottom of the core vessel. If the fluid gets too hot or for any other reason including power failures, the plug naturally melts, and the fluid dumps into a passively cooled containment vessel where decay heat is removed. This feature prevents any Three Mile Island-type accidents or radiation releases due to accident or sabotage and provides a convenient means to shut down and restart the system quickly and easily.¶ Proliferation Resistance--For all practical purposes, U233 is worthless as a nuclear weapons material, and indeed no nation has attempted to weaponize U233 because of the abundance of difficulties. U233 is considered an unsuitable choice for nuclear weapons material because whenever U233 is generated, uranium-232 (U232) contamination inevitably occurs. U232 rapidly decays into other elements, including thallium-208, a hard-gamma-ray emitter whose signature is easily detectable. The hard gamma rays from thallium-208 cause ionization of materials destroying the explosives and electronics of a nuclear weapon, and heavy lead shielding is required to protect personnel assembling the warhead. It is possible to generate U233 with little U232 contamination using specialized reactors (such as at the Hanford Site), but not with an LFTR. Any attempt to increase production of U233 in an LFTR reactor will generate U232 contamination and any attempt to steal quantities of U233 results in the reactor shutting down.¶ Energy Production--Because nearly all of the thorium is used up in an LFTR (versus only about 0.7% of uranium mined for an LWR), the reactor achieves high energy production per metric ton of fuel ore, on the order of 300 times the output of a typical uranium LWR. The LFTR allows much higher operating temperatures than does a typical LWR therefore a **higher thermodynamic efficiency**. The turbine system believed best suited for its operation is a triple-reheat closed-cycle helium turbine system, which should convert 50% of the reactor heat into electricity compared to today's steam cycle (~25% to 33%). This efficiency gain translates to about 4.11 million barrels of crude oil equivalent per year more than that generated by a steam system. Capital costs are lower due to smaller reactor & turbo-machinery size, low reactor pressures and minimal redundant safety systems. The greater energy production capability of LFTRs means we estimate the cost for electricity from a LFTR plant could be 25% to over 50% less than that from a LWR.¶ Waste--In theory, LFTRs would produce far less waste along their entire process chain, from ore extraction to nuclear waste storage, than LWRs. A LFTR power plant would generate 4,000 times less mining waste (solids and liquids of similar character to those in uranium mining) and would generate 1,000 to 10,000 times less nuclear waste than an LWR. Additionally, because LFTR burns all of its nuclear fuel, the majority of the waste products (83%) are safe within 10 years, and the remaining waste products (17%) need to be stored in geological isolation for only about 300 years (compared to 10,000 years or more for LWR waste). Additionally, the LFTR can be used to "burn down" waste from an LWR (nearly the entirety of the United States' nuclear waste stockpile) into the standard waste products of an LFTR, so long-term storage of nuclear waste would no longer be needed.¶ Supply--Thorium is abundant in the Earth's crust. It is the 36th most plentiful element in the crust--four times as common as uranium and 5,000 times as plentiful as gold. According to the U.S. Geological Survey's 2006 Mineral Yearbook, the United States is estimated to have 300,000 tons of thorium reserves (about 20% of the world's supply), more than half of which is easily extractable. Considering only the readily accessible portion, this national resource translates to nearly 1 trillion barrels of crude oil equivalent--five times the entire oil reserves of Saudi Arabia. In addition to the naturally occurring reserves, the United States currently has 3,200 metric tons of processed thorium nitrate buried in the Nevada desert. That supply is roughly equivalent to 21 billion barrels of crude oil equivalent when used in an LFTR with only minimal processing effort.¶ Secondary Products--Because an LFTR is so energy dense, the electricity and excess heat from the reactor can be used to fuel other industries beyond electricity production, including economical desalinization of water, cracking of hydrogen from water or hydrocarbons, generation of ammonia for fertilizer and fuel cells, and extraction of hydrocarbons from oil shale and tar sands. Additionally, the nuclear waste products from the LFTR include stable rhodium and ruthenium, rare elements needed in modern electronics; technetium-99, which offers great promise as a catalyst similar to platinum; iodine-131 and cesium-137 for medical applications; strontium-90 for radioisotope power; and xenon, used in commercial products and industrial processes.

#### This development path stabilizes global population and averts resource conflict

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Resource depletion may be more severe than climate change.

Global warming is indeed a severe threat to our environment and human civilization. But resource depletion may be an even more immediate threat. Physicist Tom Murphy writes the blog, Do the Math, encouraging people to quantify the problems and envisioned solutions. In a 2012 interview with OilPrice.com he says: “I see climate change as a serious threat to natural services and species survival, perhaps ultimately having a very negative impact on humanity. But resource depletion trumps climate change for me, because I think this has the potential to effect far more people on a far shorter timescale with far greater certainty. Our economic model is based on growth, setting us on a collision course with nature. When it becomes clear that growth cannot continue, the ramifications can be sudden and severe. So my focus is more on averting the chaos of economic/resource/agriculture/distribution collapse, which stands to wipe out much of what we have accomplished in the fossil fuel age. To the extent that climate change and resource limits are both served by a deliberate and aggressive transition away from fossil fuels, I see a natural alliance.” Population is stable in developed nations. World population is projected to grow from 7 billion to over 9 billion people. Most of this growth is in the developing nations. The US and other economically strong OECD nations have little population growth, attributable to immigration from the developing nations. Increasing population will increase the demand for resources of food and energy. Increased demand leads to increased competion and possible conflict. Impoverished countries birth the most children. This scatter plot uses data from the 2008 CIA world fact book. Each point corresponds to one nation, relating average number of children born to each woman and GDP per capita - closely related to income. It demonstrates that countries with high GDP per capita have birthrates that lead to a sustainable population. All the countries to the left of the vertical bar would have diminishing populations, except for immigration. With increased income, there is less need to have children to work in agriculture, or to care for aging parents. There is less need to give birth to extra children to compensate for childhood deaths. With work saving technologies such as water pumps, efficient cook stoves, and washing machines, women are freed from constant labor. They are able to have time for education and to earn money. With more independence and access to contraceptives, women can choose to have fewer children, as evidenced above. Prosperity stabilizes population. In this same plot is added a horizontal bar at $7,500 GDP per capita, arbitrarily chosen and labeled “Prosperity”. The poor nations, below $7,500, are those that have the highest birthrates. This strongly implies that improving the economic status of poor nations will lower birthrates, leading to a stable or shrinking world population. This plot cries out for a need to increase world prosperity to $7,500 GDP per capita, only 16% of the US number. With a stable or shrinking global population, world civilization can be sustainable. At the Wall Street Journal ECOmomics forum in March 2012 Microsoft founder and philanthropist Bill Gates remarked: "If you want to improve the situation of the poorest two billion on the planet, having the price of energy go down substantially is about the best thing you could do for them. ... Energy is the thing that allowed civilization over the last 220 years to dramatically change everything." This plot, also with CIA data, shows the relationship between GDP and energy - specifically electric energy, measured in kilowatt- hours per capita per year. For our civilization, electric energy is the most valuable and useful form of energy. Unlike heat from fire, or power from falling water, electric power can be used for many purposes essential to economic development. Applications include water sanitizing and distribution, sewage processing, lighting, heating, refrigeration, air conditioning, cooking, communications, computing, transportation, food processing, medical care, manufacturing, industry, and commerce. These are all hallmarks of emerging prosperity. Adequate electric power alone cannot guarantee a prosperous economy and civilization without education, basic health care, rule of law, property rights, financial system, and good government. But electricity is essential for economic progress. Over 1.3 billion people, 20% of the world population, have no access to electricity. Even rapidly developing nations such as India and South Africa can not provide full time electricity. over 10 million. Electricity can power sewage processing systems, necessary to assure clean water. The World Bank says 2.6 billion people have no access to sanitation, leading to illness that reduces GDP by 6%. Diarrhea is responsible for more child deaths than AIDS, TB, and malaria combined. UNESCO reports that 8% of worldwide electric power is used for water pumping, purification, and wastewater treatment. Clean water distribution is one example of how affordable, reliable power can free women from hauling water, helping to lead to a standard of living with time for education, gainful work, women’s independence, and choices about reproduction. The previous plot suggests an annual 2,000 kWh per capita supply leads to the $7,500 GDP per capita level that leads to sustainable birthrates and population. This minimum electric energy supply rate is 230 watts per person, about 16% of the US rate. In summary, an economy with minimum electric power availability of 230 W per person is needed to achieve the modest prosperity level of $7,500 per person leading to a sustainable population. In India today, average electric power consumption per capita is 85 W; 40% of the people have no access to electricity, and another 40% have access only a few hours per day. The long term goal of India’s government ministers is 570 W per capita, compared to 1400 W in the US.

\* World

1950 1960 1970 1980 1990 2000 2010 2020 2030 2040 2050

OECD

US

#### Specifically—Indo-Pak war

**Bokhari 10** – assistant editor at Dawn (Ashfak, 01/18, “Water dispute and war risk,” http://archives.dawn.com/archives/24980)

In March last year, a group of more than 20 different UN bodies warned that, since water has become the latest cause to stoke tensions between India and Pakistan, the world may be perilously close to its first water war. “Water is linked to the crises of climate change, energy and food supplies and prices, and troubled financial markets,” said their report. “Unless their links with water are addressed and water crises around the world are resolved, other crises may intensify and local water crises may worsen, converging into a global water crisis and leading to political insecurity and conflict at various levels.” The first attempt to use water as a military tool was made in 1503 when Leonardo da Vinci and Machiavelli planned to divert Amo River away from Pisa during the conflict between Pisa and Florence. On January 28, 2009, President Asif Ali Zardari in an article in Washington Post warned “The water crisis in Pakistan is directly linked to relations with India. Its resolution could prevent an environmental catastrophe in South Asia, but failure to do so could fuel the fires of discontent that may lead to extremism and terrorism.” In early 2009, Pakistan was seen being on the brink of a water disaster, as the availability of water which was 5,000 cubic meters per capita 60 years ago has declined to 1,200 cubic meters. By 2020, it may fall to about 800 cubic meters per capita. In recent weeks water shortage has worsened from 30 to 40 per cent because of the drought that may reduce the Rabi crops produce by 20 per cent. In case the drought continues, the country may get 21- 22 million tonnes of wheat against the target of 25 million tonnes. The first phase of the Baglihar dam, a 450-MW hydroelectric power project initiated in the 1990s, was completed on October 10, 2008. Inaugurating the project, Indian Prime Minister Manmohan Singh noted “It is a matter of satisfaction that the reconstruction programme… [entailing] 67 projects is well under way with 19 projects completed, one of which is the Baglihar project that I inaugurate today.” Zardari reacted angrily saying India`s move to block Pakistan`s water supply from the Chenab River could harm their relations. “Manmohan Singh had assured me in our meeting in New York that his country is seriously committed to our (Indus) water sharing treaty,” he said, referring to their meeting on the sidelines of the UN General Assembly a month before. “We expect him to stand by his commitment.” India didn`t take steps to abide by Singh`s commitment or provisions of the Indus treaty. Meanwhile, talk about water war had been gaining currency. On November 3, 2008, PML-Q chief and former premier Chaudhry Shujaat Hussain said the water crisis between Pakistan and India could become more serious than terrorism and can result in a war. Mr Majid Nizami, chief editor of a group of newspapers, observed in June last that the water dispute with India could trigger a war. “Pakistan can become a desert within the next 10 to 15 years. We should show upright posture or otherwise prepare for a nuclear war,” he said.

**Extinction**

Greg Chaffin 11, Research Assistant at Foreign Policy in Focus, July 8, 2011, “Reorienting U.S. Security Strategy in South Asia,” online: http://www.fpif.org/articles/reorienting\_us\_security\_strategy\_in\_south\_asia

The greatest threat to regional security (although curiously not at the top of most lists of U.S. regional concerns) is the possibility that increased India-Pakistan tension will erupt into all-out warthat could quickly escalate into a nuclear exchange. Indeed, in just the past two decades, the two neighbors have come perilously close to war on several occasions. India and Pakistan remain the most likely belligerents in the world to engage in nuclear war. Due to an Indian preponderance of conventional forces, Pakistan would have a strong incentive to use its nuclear arsenal very early on before a routing of its military installations and weaker conventional forces. In the event of conflict, Pakistan’s only chance of survival would be the early use of its nuclear arsenal to inflict unacceptable damage to Indian military and (much more likely) civilian targets. By raising the stakes to unacceptable levels, Pakistan would hope that India would step away from the brink. However, it is equally likely that India would respond in kind, with escalation ensuing. Neither state possesses tactical nuclear weapons, but both possess scores of city-sized bombs like those used on Hiroshima and Nagasaki. Furthermore, as more damage was inflicted (or as the result of a decapitating strike), command and control elements would be disabled, leaving individual commanders to respondin an environment increasingly clouded by the fog of war and decreasing the likelihood that either government (what would be left of them) would be able to guarantee that their forces would follow a negotiated settlement or phased reduction in hostilities. As a result any suchconflict would likely continue to escalateuntil one side incurred an unacceptable or wholly debilitating level of injury or exhausted its nuclear arsenal. A nuclear conflict in the subcontinentwould havedisastrous effects on the world as a whole. In a January 2010 paper published in Scientific American, climatology professors Alan Robock and Owen Brian Toon forecast the global repercussionsof a regional nuclear war. Their results are strikingly similar to those of studies conducted in 1980 that conclude that a nuclear war between the United States and the Soviet Union wouldresult in acatastrophic and prolonged nuclear winter,which could very well place the survival of the human race in jeopardy. In their study, Robock and Toon use computer models to simulate the effect of a nuclear exchange between India and Pakistan in which each were to use roughly half their existing arsenals (50 apiece). Since Indian and Pakistani nuclear devices are strategic rather than tactical, the likely targets would be major population centers. Owing to the population densities of urban centers in both nations, the number of direct casualties could climb as high as 20 million. The fallout of such an exchange would not merely be limited to the immediate area. First, the detonation of a large number of nuclear devices would propel as much as seven million metric tons of ash, soot, smoke, and debris as high as the lower stratosphere. Owing to their small size (less than a tenth of a micron) and a lack of precipitation at this altitude, ash particles would remain aloft for as long as a decade, during which time the world would remain perpetually overcast. Furthermore, these particles would soak up heat from the sun, generating intense heat in the upper atmosphere that would severely damage the earth’s ozone layer. The inability of sunlight to penetrate through the smoke and dust would lead toglobal cooling by as much as 2.3 degrees Fahrenheit. This shift in global temperature would lead to more drought, worldwide food shortages, and widespread political upheaval. Although the likelihood of this doomsday scenario remains relatively low, the consequences are dire enough to warrant greater U.S. and international attention. Furthermore, due to the ongoing conflict over Kashmir and the deep animus held between India and Pakistan, it might not take much to set them off. Indeed, following the successful U.S. raid on bin Laden’s compound, several members of India’s security apparatus along with conservative politicians have argued that India should emulate the SEAL Team Six raid and launch their own cross-border incursions to nab or kill anti-Indian terrorists, either preemptively or after the fact. Such provocative action could very well lead to all-out war between the two that couldquickly escalate.

#### Resource wars will escalate—best scholarship

**Jawan, 12** [S Naji, Faculty of Human Ecology, Universiti Putra Malaysia, ‘Resource Wars’ in the Post-Cold War Era: The Persian Gulf Oil, US, and the Iraq War Arts and Social Sciences Journal, Vol. 2012: ASSJ-49, <http://astonjournals.com/manuscripts/Vol2012/ASSJ-49_Vol2012.pdf>]

\*\*\*Cites **Yergin**, Pulitzer Prize winning economic researcher. and chairman of Cambridge Energy Research Associates and Billon (MBA Paris, PhD Oxford) is Associate Professor at the University of British Columbia with the Department of Geography and Klare [professor](http://en.wikipedia.org/wiki/Professor) of Peace and World Security Studies, at [Hampshire College](http://en.wikipedia.org/wiki/Hampshire_College), author of *Resource Wars* and *Blood and Oil: The Dangers and Consequences of America's Growing Petroleum Dependency* (Metropolitan) and Dr. Susanne Peters the Academic Director of the Kent State University and teaches International Relations and European Politics\*\*\*

2. ‘Resource Wars’ and Conflict for Oil Natural resources have always played a key role in conflicts and wars taking place. These struggles are often caused by the scarcity and immense value resources such as diamonds, copper, gold, water, timber, arable land, and oil [1]. Among them, the role of petroleum as a vital commodity for the industrial world, and due to its global influences has been most remarkable, and as Yergin [8] noted, the history of petroleum has always been associated with the history of struggle and war. Indeed, “petroleum is unique among the world’s resources” [1]. There is this view that, the 21st century, similar to the previous century will be a “century of oil” and from this view, access to oil as a global resource has always included those issues that have formed battles [9]. In fact, the new resource wars in the world will be a significant problem in the future. It will be because of the oil supply crisis as a natural resource. It will occur because of the declining oil reservoirs as well as the unbalanced distribution of these resources in particular along the North-South axis [4]. Billon [3] believes that the natural resources have always been introduced as a **crucial motive** of conflicts and wars. He refers to the more important role of these resources in creating wars in the 1990s and argues that some interventions take place because of the lust for valuable resources. He also believes that, on the other hand, the political and economic vulnerabilities of dependent countries on resources are the main reason for the importance of resources in creating wars. In this respect, the geopolitical thinking in the west, concerning resources, has been established over an equally strong relationship amongst power, trade, and war which has been tied strongly to maritime navigation and overseas resources too. In the past, this geopolitical thought had been reflected in the view that “whoever commands the oceans commands the trade of the world, and whoever commands the trade of the world commands the riches of the world, and whoever is master of that commands the world itself.” With growing dependence of the western countries on imported materials during the 19th century, indeed, great western countries expanded their command over raw materials throughout the world. In this commentary, some classic geopolitical concepts such as “vital space” or Lebensraum for accessing further resources and Mackinder’s “Heartland” in warning about the role of railways in control of resources are very important [3]. Oil is the most significant overseas resource, and Billon [3], showed the key role it played during World War I and World War II. The vulnerability of those resources at that time was also revealed so that during the Cold War, ultimately, it was focused “on the vulnerability of rising resource supply dependence” which required various strategies to secure the needed resources in the forms of military deployments, accumulation of resources, diplomatic activities, coup d’état, etc. [3]. In this respect, four important events have also been mentioned by Billon, which have influenced the oil strategies and history; the decolonization process, Suez crisis in 1956, the 1973 Arab oil embargo, and the Islamic revolution of Iran in 1979. He also mentioned two important events, the end of the Cold War and the Iraqi invasion of Kuwait, as events that increased the importance of energy security and vulnerability of these resources. Billon, on the other hand, indicates the necessity of energy security for the oil producer countries. For him, always one of the strategic http://astonjournals.com/assj 3 Arts and Social Sciences Journal, Vol. 2012: ASSJ-49 concerns for importing and exporting countries relates to geopolitics of energy security. In that regard, he also considers the natural resources revenues as a strong instrument to create wars in the post-Cold War era. This view is similar to Huntington’s idea that oil-rich countries in the Persian Gulf became money-rich and then weapons-rich, and then, several wars finally occurred between Arab and Israel [10]. Peters [4], however, in his work “Coercive Western Energy Security Strategies: ‘Resource Wars’ as a New Threat to Global Security,” explains the conditions of the Cold War era concerning resource wars and believes that, in 1986, a list of 12 wars and skirmishes in the 20th century was presented indicating that all were started by clashes over access to resources, renewable or non-renewable. For him, the 1991 Gulf War was the first interstate war on a major scale in the post-Cold War era, which was fought to control the oil of the region. From his view, oil is the most important non-renewable resources. In particular, it is a vital commodity in the industrial countries, with industrialized economies, particularly in agriculture and transportation sectors. As evidence, he refers to demand rates of consumer countries and indicates that demand is growing significantly and will continue to do so especially in the forthcoming decades such that in accordance with the international energy agency’s (IEA) request for oil between 1997 and 2020 which is anticipated to rise with a growth rate of 1.9% per year [4]. In this respect and according to an international group of petroleum specialists (Association for the Study of Peak Oil, ASPO), researchers will witness the peak of world supply of oil in early 2010, and as a consequence, the energy prices will grow, and ultimately the world will face economic upheaval. Peters examines in fact, the resources conflict from the South–North perspectives and argues that 67.3% of all proven oil reservoirs has been covered by the G-77 and OPEC, and Arab league covers nearly 60% of world oil reservoirs. On the other hand, the demands of the developing countries are growing too. It is expected to rise almost three-fold as fast as in the developed world. It is estimated that from 43% for today to 55% of total global consumption by 2020. Therefore, conflict between South and North will be built over the distribution of energy resources among the energy-producing states and the energy-consuming states. There is, indeed, this view that, wars are generally the result of a multifaceted combination of motives, and the most important motivation is the concerns that are related to access and control of resources [4]. It is interesting that Peters refers to two wars in the post-Cold War as “resource wars,” which were the result of the US coercive strategy in order to protect energy supplies. In this respect, however, Singh refers to three wars in the Persian Gulf; two Iraq wars and the Afghanistan war that took place between two Iraq wars. He, in reference to the Afghanistan war, presents this question: “Is the NATO military presence in South-West Asia only to fight terrorism and introduce democracy or is there a hidden agenda like dominating the energy sources for the use of the west? Are they spending billions of dollars to maintain a large number of troops not only in Iraq but also in the neighborhood for political philanthropy, like establishing democracy, or is it an investment for energy security in the future?” [11]. Singh, with reference to some studies emphasizes that bypassing the National Oil Company of Iraq in support of free market of oil was the aim of neo-conservatives, as it would reduce the domination of OPEC and other oil producers over the international oil market. He refers to production and consumption of oil for the period 1970–2003, and emphasizes the US dependency on foreign oil. He also stresses three significant issues: a continuous decrease in oil production, growing oil consumption, and as a result constantly rising dependence upon foreign imported oil. This increasing dependence has been shown to grow from 12.15% in 1970 to 43.7% in 1990 and to 65.1% in 2003. From this point of view, as the oil reserves of the US, South-East Asia and North Sea are declining; all the major consumers’ dependence is increasing, especially on the Persian Gulf oil because of their future needs. This increase for the US is from 2.3 million barrels per day (mbd) in 2003 to 4.2 mbd by 2020. He also refers to declining oil production in the US from 9.5 mbd in 1970 to 6.72 mbd in 1994 and to 5.72 mbd in 2003. There is also decline in Norway, UK, and Indonesia. Clearly, the oil reservoirs and productions of the Persian Gulf area will increasingly be vital for global energy security because the decreasing oil production and limited reservoirs in the OECD states [11]. Another commentator, Klare [12] discusses three main resources in his work: energy resources (oil and natural gas), water, and valuable timber and minerals, and refers to the importance of these vital materials in the outbreak of conflicts across the world. Klare reveals his own worry about these conflicts and believes that it is a necessary issue to find and plan ways to resolve the issue of the competition over natural resources, because controlling specific natural resources is a national security theme of many countries and “something worth fighting for.” In this respect, he divides the reasons of conflicts after the Cold War to two periods and says that fighting in Central Africa, Kashmir, and the former Yugoslavia focused the global community on preventing ethnic conflict in the early 1990s, while in the next few years, violence in Africa occurred in the fight to control the copper mines, diamond fields, and farmlands. Concerning oil and gas, however, Klare pointed out the mechanism of supply and demand as the starting point of the pressure on http://astonjournals.com/assj 4 Research Article energy reserves. He believes that increasing the populations and expanding the economic activities caused increasing need for vital materials, and demands for these materials, especially oil and gas, has always risen. Based on this viewpoint, “as shortages of critical materials rise in frequency and severity, the competition for access to the remaining supplies of these commodities will grow more intense” [12]. He refers to a report of the US Department of Energy and declares that the world oil consumption will increase from about 77 mbd in 2000 to 110 mbd in 2020 (about 43%). In this condition, the world consumption will rise to approximately 670 billion barrels of oil only from 2000 till 2020. It means that it will include nearly two-thirds of the proven oil reservoirs of the world. In this respect, it seems that the production of petroleum will not be able to keep up with global demands and as a result the world will face an unbalanced global supply and demand [12].

#### Technetium-99 shortages coming now—kills nuclear medicine

Galloway 7/23 (Gloria, 7/23/12, <http://m.theglobeandmail.com/news/politics/medical-procedures-cancelled-as-isotope-shortage-becomes-farce/article1213042/?service=mobile>, RBatra)

The country's nuclear-medicine specialists barely coped with a reduced supply of technetium-99, the isotope used in most nuclear diagnoses and treatments, after the National Research Universal (NRU) reactor at Chalk River, Ont., which produces a third of the world's supply was shut down for repairs last May.

But the additional closure of the world's other large isotope-producing reactor has created "a true scarcity," Eric Turcotte, a nuclear medicine researcher from the University of Sherbrooke, told the House of Commons' natural resources committee yesterday.

"I believe some patients will not get their scans in time," said Dr. Turcotte, one of the four members of an expert panel appointed by the federal government last year to explore ways of securing a reliable supply of the radioactive material.

"When we have 15 to 20 per cent of the product that we need for the exams, we know we have to focus on the most urgent cases and then we have to figure out who are the most urgent patients. Sometimes it's a matter of life and death," he said.

Jean-Luc Urbain, the president of the Canadian Society of Nuclear Medicine, said in a telephone interview that the shortage of isotopes is forcing doctors to cancel procedures. "At this point in time, we cannot guarantee that people are getting what they need for their health care," Dr. Urbain said.

#### Nuclear medicine solves disease

**Olsen, 94** (John, Ohio State Associate Professor of Radiology, Columbus Dispatch, 9/10, “Voinovich Is on Right Track to Deal with Nuclear Waste,” L/N)

I applaud Gov. George V. Voinovich's position on low-level radioactive waste (recent Dispatch article and letter to the editor). The governor is correct. Ohio's agreement with five other Midwest states, in the Midwest Interstate Lo-Level Radioactive Waste Commission, to develop a centralized disposal facility for this waste offers a good, equitable solution. It makes sound environmental and economic sense, it complies with federal law, and it is the responsible bipartisan continuation of policy initiated in prior administrations. Low-level radioactive waste is indeed an issue that affects every Ohioan, and our state lawmakers would serve their constituents well by addressing it promptly. With the compact plan, 60 percent of the costs for a disposal facility come from other states, and Ohio is obligated to operate a facility for only 20 years at a fixed capacity. Outside the compact, Ohio would have to build a much larger disposal facility that would be forced to accept all Ohio's waste indefinitely. In my view, disposing of this waste safely is simply a matter of social responsibility, whether the waste is a byproduct of power production, research or nuclear medicine, my own field. For my part, I fear that the loss of access to radioactive materials could limit our ability to diagnose and manage disease. Nuclear medicine procedures, about 11 million a year in this country, help us pinpoint problems - often well before other more costly and painful procedures. Radioisotopes are also vital tools for biomedical researchers seeking cures for such diseases as AIDS, cancer and Alzheimer's. For those activities to continue, proper, permanent disposal of low-level radioactive waste is crucial. For the time being, we can safely store the waste where it is produced, but we shouldn't view this as a permanent solution. Ohio State University is not a long-term disposal site, nor is Aultman Hospital in Canton, Kent State University, Miami University, or any of the other producers of low-level radioactive waste in Ohio. Relief for these organizations and the citizens they serve now lies in the hands of our state lawmakers.

**Extinction**

**GREGER 08 –** M.D., is Director of Public Health and Animal Agriculture at The Humane Society of the United States (Michael Greger, , Bird Flu: A Virus of Our Own Hatching, <http://birdflubook.com/a.php?id=111>)

Senate Majority Leader Frist describes the recent slew of emerging diseases in almost biblical terms: “All of these [new diseases] were advance patrols of a great army that is preparing way out of sight.”3146 Scientists like Joshua Lederberg don’t think this is mere rhetoric. He should know. Lederberg won the Nobel Prize in medicine at age 33 for his discoveries in bacterial evolution. Lederberg went on to become president of Rockefeller University. “Some people think I am being hysterical,” he said, referring to pandemic influenza, “but there are catastrophes ahead. We live in evolutionary competition with microbes—bacteria and viruses. There is no guarantee that we will be the survivors.”3147 There is a concept in host-parasite evolutionary dynamics called the Red Queen hypothesis, which attempts to describe the unremitting struggle between immune systems and the pathogens against which they fight, each constantly evolving to try to outsmart the other.3148 The name is taken from Lewis Carroll’s Through the Looking Glass in which the Red Queen instructs Alice, “Now, here, you see, it takes all the running you can do to keep in the same place.”3149 Because the pathogens keep evolving, our immune systems have to keep adapting as well just to keep up. According to the theory, animals who “stop running” go extinct. So far our immune systems have largely retained the upper hand, but the fear is that given the current rate of disease emergence, the **human race is losing the race**.3150 In a Scientific American article titled, “Will We Survive?,” one of the world’s leading immunologists writes: Has the immune system, then, reached its apogee after the few hundred million years it had taken to develop? Can it respond in time to the new evolutionary challenges? These perfectly proper questions lack sure answers because we are in an utterly unprecedented situation [given the number of newly emerging infections].3151 The research team who wrote Beasts of the Earth conclude, “Considering that bacteria, viruses, and protozoa had a more than two-billion-year head start in this war, a victory by recently arrived Homo sapiens would be remarkable.”3152 Lederberg ardently believes that emerging viruses may imperil human society itself. Says NIH medical epidemiologist David Morens, When you look at the relationship between bugs and humans, the more important thing to look at is the bug. When an enterovirus like polio goes through the human gastrointestinal tract in three days, its genome mutates about two percent. That level of mutation—two percent of the genome—has taken the human species eight million years to accomplish. So who’s going to adapt to whom? Pitted against that kind of competition, Lederberg concludes that the human evolutionary capacity to keep up “may be dismissed as almost totally inconsequential.”3153 To help prevent the evolution of viruses as threatening as H5N1, the least we can do is take away a few billion feathered test tubes in which viruses can experiment, a few billion fewer spins at pandemic roulette. The human species has existed in something like our present form for approximately 200,000 years. “Such a long run should itself give us confidence that our species will continue to survive, at least insofar as the microbial world is concerned. Yet such optimism,” wrote the Ehrlich prize-winning former chair of zoology at the University College of London, “might easily transmute into a tune whistled whilst passing a graveyard.”3154

#### Independently accesses global war

**Koblentz, 10** (Deputy Director of the Biodefense Program @ GMU, Assistant Professor in Public and International Affairs, March, "Biosecurity Reconsidered: Calibrating Biological Threats and Responses." International Security Vol. 34, No. 4, p. 96-132)

Pandemics are disease outbreaks that occur over a wide geographic area, such as a region, continent, or the entire world, and infect an unusually high proportion of the population. Two pandemic diseases are widely cited as having the potential to pose direct threats to the stability and security of states: HIV/AIDS and influenza. HIV/AIDS. Since it was first identified in 1981, HIV is estimated to have killed more than 25 million people worldwide. According to the Joint UN Program on HIV/AIDS (UNAIDS), the percentage of the global population with HIV has stabilized since 2000, but the overall number of people living with HIV (33 million in 2007) has steadily increased. Sub-Saharan Africa continues to bear a disproportionate share of the global burden of HIV with 35 percent of new HIV infections, 75 percent of AIDS deaths, and 67 percent of all people living with HIV. 116 Scholars have identified four ways that HIV/AIDS can affect security. 117 First, the disproportionately high prevalence of HIV/AIDS in the armed forces of some nations, particularly in Southern Africa, may compromise the ability of those states to defend themselves from internal or external threats. Militaries with high rates of HIV infection may suffer losses in combat readiness and effectiveness as infected troops are transferred out of combat roles, units lose cohesion because of high turnover rates, middle management is "hollowed out" by the early death or disability of officers, and defense budgets are strained because of rising medical costs and the need to recruit and train replacements for sick soldiers. The second threat is that HIV/AIDS will undermine the international peace-keeping system. Nations with militaries with high rates of HIV/AIDS will be unable to provide troops for international peacekeeping missions; nations with healthy militaries may be unwilling to commit troops to peacekeeping operations in nations with a high prevalence rate of HIV/AIDS; and war-torn nations may be unwilling to accept peacekeepers for fear they will spread the disease in their country. The third threat is that a "second wave" of HIV/AIDS could strike large, strategically important countries such as China, India, and Russia. These states, which possess nuclear weapons and are important players in critical regions, also suffer from internal security challenges that could be aggravated by a severe AIDS epidemic and its attendant socioeconomic disruptions. The fourth threat is that the high prevalence of HIV in less developed countries will cause political instability that could degenerate into internal conflict or spread into neighboring countries. Unlike most diseases, which affect primarily the poor, young, and old, HIV/AIDS strikes young adults and members of the middle and upper classes. By sickening and killing members of society when they should be their most productive, HIV/AIDS has inflicted the "single greatest reversal in human development" in modern history. 118

#### Rhodium shortages coming now

Mineweb 12 (6/26/12, Platinum Demand To Substantially Outstrip Supply In 2012 – CPM, <http://www.tradepreciousmetals.com/platinum-demand-to-substantially-outstrip-supply-in-2012-cpm/>, RBatra)

“The platinum market is expected to be in a substantial deficit this year and palladium could fall into a deficit, due to lower South African and Russian output,” CPM forecast Tuesday in its CPM Group Platinum Group Metals Yearbook 2012.

“Rhodium’s surplus is expected to decline in 2012, similar to platinum and palladium, mostly due to a decline in mine production in South Africa, the largest producer of PGMs,” said the New York City-based commodities consultants.

In the yearbook, CPM observed platinum and palladium supply and demand growth slowed in 2011; demand growth due to weaker economic conditions; and supply growth slowed due to production disruptions at South African PGM mines.

“In 2012 supply is forecast to fall as virtually no new PGM production capacity is added to annual supply and labor strikes earlier this year halted production for extended periods,” CPM predicted.

#### Key to auto industry

Zimmerman 08 (Brad, 4/10/08, Rhodium Investment: The Rarest of Precious Metals, <http://www.nuwireinvestor.com/articles/rhodium-investment-the-rarest-of-precious-metals-51515.aspx>, RBatra)

Rhodium, like palladium, is a member of the platinum metals group; it is frequently used to harden alloys of platinum and palladium. Rhodium is a key component in the in the world automobile industry. Rhodium investors have seen the metal's price increase rapidly during the last five years, but with a soaring price comes the worry that the bubble may eventually burst.

Some of rhodium’s principal uses are as a finish for jewelry and mirrors, in electrical connections and in aircraft turbine engines. It is also frequently used in catalytic converters in automobiles with internal combustion engines, which help to curb emissions. Lastly, rhodium can be considered the ultimate symbol of wealth—above and beyond gold or platinum—because of its price and rarity.

Rhodium doesn’t come cheap by any means, and its price has been steadily rising since 2003, according to Kitco Precious Metals, a metal dealer. In a five-year span beginning in 2003, rhodium has averaged a price of $3,224.51 per ounce, climbing higher than $9,000 per ounce between January and April of this year.

What has helped rhodium prices steadily rise is its use in catalytic converters, where—especially in diesel-powered vehicles—the metal has no substitute. Rhodium is expected to keep outpacing other precious metals in price as its need in diesel and non-diesel catalytic converters continues, according to the International Herald Tribune. Europe in particular has a high demand for rhodium, as 60 percent of all its automobiles are diesel-powered.

Rhodium is found in mines with other precious metals and platinum group metals

Rhodium is mined with other platinum group metals and precious metals

The methods used to acquire rhodium are quite complex, as it is one of the rarest natural metals produced in significant quantities, according to ResourceInvestor.com. No rhodium-specific mine exists; rather, the metal is mixed with other metal ores such as silver, gold and platinum, and requires industrial extraction.

South Africa holds the world’s largest mines where rhodium can be found. Additionally, South Africa is the principal exporter of the precious metal, exporting 60 percent of the world's supply of rhodium. Annual world production of rhodium is estimated between seven and eight tons, according to Principal Metals Online. In comparison, the world production of gold was more than 2,250 tons in 2006, according to the United States Geological Survey.

Recent power shortages in South Africa have cut the rhodium supply, further driving up the metal's price. With demand heavily outweighing supply, South African mining companies have been forced to slow and sometimes even halt rhodium output, with no clear resolution to the crisis expected to come until 2012.

Expect world prices to continue to reflect the supply shortage. The increased cost of rhodium might also be felt in the automobile market, potentially driving up the price of catalytic converters, and in other markets that use rhodium.

**That solves effective ground forces**

Clark ’08 (Wesley, Retired Army General and Former Supreme Allied Commander Of NATO, Senior Fellow At The Burkle Center For International Relations At The University Of California At Los Angeles, New York Times, "What's Good for G.M. Is Good For the Army”, November 17th 2008, <http://www.nytimes.com/2008/11/16/opinion/16clark.html?_r=2>)

AMERICA’S automobile industry is in desperate trouble. Financial instability, the credit squeeze and closed capital markets are hurting domestic automakers, while decades of competition from foreign producers have eroded market share and consumer loyalty. Some economists question the wisdom of Washington’s intervening to help the Big Three, arguing that the automakers should pay the price for their own mistakes or that the market will correct itself. But we must act: aiding the American automobile industry is not only an economic imperative, but also a national security imperative. When President Dwight Eisenhower observed that America’s greatest strength wasn’t its military, but its economy, he must have had companies like General Motors and Ford in mind. Sitting atop a vast pyramid of tool makers, steel producers, fabricators and component manufacturers, these companies not only produced the tanks and trucks that helped win World War II, but also lent their technology to aircraft and ship manufacturing. The United States truly became the arsenal of democracy. During the 1950s, advances in aviation, missiles, satellites and electronics made Detroit seem a little old-fashioned in dealing with the threat of the Soviet Union. The Army’s requests for new trucks and other basic transportation usually came out a loser in budget battles against missile technology and new modifications for the latest supersonic jet fighter. Not only were airplanes far sexier but they also counted as part of our military “tooth,” while much of the land forces’ needs were “tail.” And in those days, “more teeth, less tail” had become a key concept in military spending. But in 1991, the Persian Gulf war demonstrated the awesome utility of American land power, and the Humvee (and its civilian version, the Hummer) became a star. Likewise, the ubiquitous homemade bombs of the current Iraq insurgency have led to the development of innovative armor-protected wheeled vehicles for American forces, as well as improvements in our fleets of Humvees, tanks, armored fighting vehicles, trucks and cargo carriers. In a little more than a year, the Army has procured and fielded in Iraq more than a thousand so-called mine-resistant ambush-protected vehicles. The lives of hundreds of soldiers and marines have been saved, and their tasks made more achievable, by the efforts of the American automotive industry. And unlike in World War II, America didn’t have to divert much civilian capacity to meet these military needs. Without a vigorous automotive sector, those needs could not have been quickly met. More challenges lie ahead for our military, and to meet them we need a strong industrial base. For years the military has sought better sources of electric power in its vehicles — necessary to allow troops to monitor their radios with diesel engines off, to support increasingly high-powered communications technology, and eventually to support electric propulsion and innovative armaments like directed-energy weapons. In sum, this greater use of electricity will increase combat power while reducing our footprint. Much research and development spending has gone into these programs over the years, but nothing on the manufacturing scale we really need. Now, though, as Detroit moves to plug-in hybrids and electric-drive technology, the scale problem can be remedied. Automakers are developing innovative electric motors, many with permanent magnet technology, that will have immediate military use. And only the auto industry, with its vast purchasing power, is able to establish a domestic advanced battery industry. Likewise, domestic fuel cell production — which will undoubtedly have many critical military applications — depends on a vibrant car industry.

#### Key to heg and peacekeeping

Kagan and O’Hanlon ‘07 (Fredrick, American Enterprise Institute and Michael, Brookings Institute, “The Case for Larger Ground Forces”)

We live at a time when wars not only rage in nearly every region but threaten to erupt in many places where the current relative calm is tenuous. To view this as a strategic military challenge for the United States is not to espouse a specific theory of America’s role in the world or a certain political philosophy. Such an assessment flows directly from the basic bipartisan view of American foreign policy makers since World War II that overseas threats must be countered before they can directly threaten this country’s shores, that the basic stability of the international system is essential to American peace and prosperity, and that no country besides the United States is in a position to lead the way in countering major challenges to the global order. Let us highlight the threats and their consequences with a few concrete examples, emphasizing those that involve key strategic regions of the world such as the Persian Gulf and East Asia, or key potential threats to American security, such as the spread of nuclear weapons and the strengthening of the global Al Qaeda/jihadist movement. The Iranian government has rejected a series of international demands to halt its efforts at enriching uranium and submit to international inspections. What will happen if the US—or Israeli—government becomes convinced that Tehran is on the verge of fielding a nuclear weapon? North Korea, of course, has already done so, and the ripple effects are beginning to spread. Japan’s recent election to supreme power of a leader who has promised to rewrite that country’s constitution to support increased armed forces—and, possibly, even nuclear weapons— may well alter the delicate balance of fear in Northeast Asia fundamentally and rapidly. Also, in the background, at least for now, Sino- Taiwanese tensions continue to flare, as do tensions between India and Pakistan, Pakistan and Afghanistan, Venezuela and the United States, and so on. Meanwhile, the world’s nonintervention in Darfur troubles consciences from Europe to America’s Bible Belt to its bastions of liberalism, yet with no serious international forces on offer, the bloodletting will probably, tragically, continue unabated. And as bad as things are in Iraq today, they could get worse. What would happen if the key Shiite figure, Ali al Sistani, were to die? If another major attack on the scale of the Golden Mosque bombing hit either side (or, perhaps, both sides at the same time)? Such deterioration might convince many Americans that the war there truly was lost—but the costs of reaching such a conclusion would be enormous. Afghanistan is somewhat more stable for the moment, although a major Taliban offensive appears to be in the offing. Sound US grand strategy must proceed from the recognition that, over the next few years and decades, the world is going to be a very unsettled and quite dangerous place, with Al Qaeda and its associated groups as a subset of a much larger set of worries. The only serious response to this international environment is to develop armed forces capable of protecting

America’s vital interests throughout this dangerous time. Doing so requires a military capable of a wide range of missions—including not only deterrence of great power conflict in dealing with potential hotspots in Korea, the Taiwan Strait, and the Persian Gulf but also associated with a variety of Special Forces activities and stabilization operations. For today’s US military, which already excels at high technology and is increasingly focused on re-learning the lost art of counterinsurgency, this is first and foremost a question of finding the resources to field a large-enough standing Army and Marine Corps to handle personnel intensive missions such as the ones now under way in Iraq and Afghanistan.

#### Rhodium solves nitrous oxide emissions from cars

Simmons 11—University of Augsburg (John, Pub. 2011, “Materials critical to the energy industry: An Introduction,” <http://www.bp.com/liveassets/bp_internet/globalbp/STAGING/global_assets/e_s_assets/e_s_assets_2010/downloads_pdfs/Materials_March2012.pdf>, RBatra)

The introduction of catalytic converters on gasoline engine vehicles has reduced their harmful emissions by vast amounts. It is estimated that autocatalysts save 15 tonnes of emissions over the 10-year life of the average car. The three-way catalyst that is fitted to the majority of the world’s new vehicles reduces nitrogen oxides, carbon monoxide and unburned hydrocarbons. Rhodium is the key element required to catalyse the reactions that reduce the nitrogen oxides. Now, over 85% of all new vehicles, worldwide, are fitted with a catalyst, resulting in a reduction of emissions for the average car from over 60 down to two grammes per kilometre. The high cost of the metal has driven research to reduce the amount of rhodium used in each catalyst, below today’s average level of less than one gramme in each car. Diesel cars do not use rhodium.

#### That solves the ozone layer

**Fields 4** (Scott, "Global Nitrogen: Cycling out of Control", Environ Health Perspect; 112(10): A556-A563, July, <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1247398>)

But as nitrogen levels continue to rise, Townsend says, the net health effects become increasingly negative. Furthermore, says Galloway, reactive nitrogen can not only impact many different ecosystems, but a single atom also can make mischief repeatedly, unlike most better recognized pollutants. “If you put a molecule of NOx in the atmosphere from fossil fuel combustion or a molecule of ammonium on an agricultural field as a fertilizer,” he explains, “you have a whole series, or cascade, of effects that goes from acid rain to particle formation in the atmosphere, decreasing visibility and causing impacts on human health, acid rain, soil and stream acidification, coastal eutrophication, decreasing biodiversity, human health issues in groundwater, and nitrous oxide [N2O] emissions to the atmosphere, which impact the greenhouse effect and stratospheric ozone.”

Nitrogen in the Air

The effects of reactive nitrogen on ozone are profound, wreaking havoc at every elevation. “In areas like the northeastern United States, because we have more automobiles than agriculture, our major contribution to global nitrogen cycling is oxidized forms of nitrogen,” Aber says. NOx, which can form from the application of nitrogen fertilizers, burning of biomass, and combustion of fossil fuels, is an important contributor to the formation of smog and ground-level ozone. “That’s [the Northeast’s] most important form of air pollution,” Aber says.

#### High concentrations of NOx, which are common in urban areas with their high car populations, can produce low-lying ozone, which in turn can cause or worsen asthma, cough, reactive airways disease, respiratory tract inflammation, and chronic respiratory disease. High levels of NOx can also worsen viral infections such as the common cold. In addition to ground-level sources, where denitrification (the conversion of reactive nitrogen to N2) in soil also produces some N2O, aircraft inject NOx directly into the atmosphere.

At mid-altitudes, N2O acts as a green-house gas, with each molecule absorbing about 200 times as much outgoing radiation as carbon dioxide. And although at low altitudes reactive nitrogen increases ozone, at very high altitudes it actually destroys ozone. In the stratosphere, ultraviolet light breaks N2O apart, producing NO, which in turn acts as a catalyst to break down ozone. Destroying ozone in the stratosphere, of course, allows more ultraviolet light to reach the Earth’s surface, resulting in more skin cancers—an article in the 30 March 1998 International Journal of Climatology by Rajaram P. Kane, a senior scientist at the Brazilian National Institute for Space Research, says that reductions in ozone suggest a 10–20% increase in ultraviolet-B radiation, which would “explain a 20–40% rise in skin cancer in the human population since the 1970s.”

#### This risks extinction

UN 2k – United Nations (Office of the Secretary General, “MESSAGE ON THE OCCASION OF THE INTERNATIONAL DAY FOR THE PRESERVATION OF THE OZONE LAYER”, <http://ozone.unep.org/pdfs/ozoneday2000_sg-address-en.doc>)

Promoting better standards of life for all human beings is one of the values on which the United Nations was built. As we move into the 21st century, it becomes clearer that in order to improve living conditions, we must protect the natural environment and resources that allow us to survive on earth. By permitting environmentally-devastating practices to continue, we are handing our children a bleak and hazardous future.

Today we have an opportunity to focus global attention and action on the conservation of the ozone layer. This natural, protective gift of the earth screens out the sun’s ultraviolet rays that are harmful to people, animals, and plants. Maintaining this barrier between the sun and the earth is essential to human survival.

### 1ac plan

#### The United States Federal Government should expand loan guarantees for small modular Liquid Fluoride Thorium Reactors in the United States.

### 1ac solvency

#### Small modular thorium reactors are key – the tech is ready

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

SO, IF YOU WERE GOING TO DESIGN and build a new nuclear reactor from scratch, what would it look like? First of all, you’d make it small. The old antinuke saw says, “Nuclear reactors come in only one size: extra large.” But compact modular reactors that can be prefabricated, transported by shipping container, and assembled on site are now seen by many experts as the future of nuclear energy. “If you go small, and manufacture reactors like Henry Ford did cars, there’s a host of advantages,” Tom Sanders told me shortly before he took over as president of the American Nuclear Society in 2009. (He is now its president emeritus.) “You could use automated manufacturing processes instead of doing every weld individually, you could get the plants licensed in a two-year time frame instead of seven, and it’d be much cheaper on a per-kilowatt basis.” Virtually all the major nuclear vendors, including GE-Hitachi Nuclear Energy, Bechtel (a company not exactly renowned for miniaturization), Babcock & Wilcox, and Westinghouse (now owned by the Korean tech giant Toshiba) are developing small modular reactors (SMRs). These reactors can use uranium or thorium (or even plutonium), but thorium, with its higher efficiency, offers unique qualities that make it well suited for miniaturization. They produce less than 300 megawatts, the limit for an officially small reactor. Future versions that could fit on the back of a flatbed truck are envisioned at 60 or even 30 megawatts. Like mobile homes, SMRs can be manufactured centrally and assembled on site, facilitating financing and shortening the time to production; in theory, multiple SMRs could be combined to create a large generating station. Keeping the plants small and dispersed, though, makes them less tempting targets for would-be terrorists—as does fueling them with thorium. More important, they could produce energy at a lower price per kilowatt than conventional nuclear plants, bringing the cost of nuclear power more into line with low-cost coal production. Newly infatuated with what’s known as distributed power generation (lots of smaller reactors scattered in lots of places), the nuclear industry has finally realized that bigger is not always better. More compact and more affordable are good things; even better is the prospect that thorium-powered SMRs could help solve the problem of nuclear waste storage and disposal. Some ambitious nuclear designers have even started to dream up small, modular fast breeder reactors, which is a bit like trying to control a tiger by putting it in a smaller cage. Bringing these designs into commercial production could take a decade or more. The three main barriers to widespread deployment, as Philip Moor puts it, are the same that face any new nuclear plant: “Dirt, licensing, and money,” he told me. Moor heads up a special committee of the American Nuclear Society formed to examine the business and manufacturing issues around SMRs. The Savannah River Site, a nuclear industrial complex operated by the DOE near Augusta, Georgia, will supply the dirt (the real estate and infrastructure), and industry heavyweights like GE, Westinghouse, and Bechtel are lining up to provide the money, at least for demonstration projects. That leaves licensing. “Once we start the demonstration projects, we can start pursuing the license application,” said Sanders of the American Nuclear Society. But “we need something operating on the ground.” That’s hardly a slam dunk. It’s worth noting that building minireactors is not a new concept. GE actually started the Power Reactor Innovation Small Modular (PRISM) program back in 1981, and in 1994 the NRC issued a report that said the commissioners foresaw no impediments to licensing. The project was abandoned in 2001 and then got a second life in 2006. With huge new supplies of natural gas starting to reach the market, and coal plants still the least expensive form of power generation, new nuclear plants will continue to look expensive. And investors looking back at 30 years of nuclear dead ends are sure to be wary of new technological marvels, however promising. The history of nuclear power demonstrates that nothing is truly viable until the core starts chain-reacting. Still, thorium-powered SMRs offer the best way forward for new nuclear power and a potential solution for global warming. Smaller is beautiful, and in this case it could be more profitable as well. ---- SECOND, YOU’D MAKE YOUR NEW REACTOR a breeder, preferably a thermal breeder. The failure of fast breeders to fulfill their promise has not erased their appeal; it has just caused the quest for a fast breeder to go in (slightly) new directions. Breeders would be advantageous not only because, theoretically, you’d never run out of fuel, but also because you can use them to process nuclear waste from conventional reactors. At least in the United States, the question of how to store nuclear waste has no clear answer, and there may not be one for the next decade. Building self-sustaining breeder reactors would, as the nuclearati like to say, “close the fuel cycle”; little radioactive material would be left over to dispose of. Then you’d want to make your reactor inherently safe. Inherent safety — not to be confused with passive safety, a very different thing — is a term much beloved by nuclear engineers‘; It has been applied to just about every reactor design, including the uranium-fueled lightwater reactor and the sodium-cooled fast breeder, machines whose inherent safety is, to say the least, questionable. Traditionally, the solution to this problem has been external safeguards, also called overengineering: add more controls, more redundancy, more miles of piping, more plumbing and alarms and sensors and gauges, and the inherent twitchiness of the world’s most volatile energy source could be contained and controlled. Unfortunately, all that engineering brings more complexity, and complexity in itself adds risk. Virtually all the reactor accidents that have ever occurred have had one of two causes: either a fiendishly complex mechanism failed because of a simple mishap (like a loose chunk of zirconium) or a human being failed at the task of monitoring and managing a fiendishly complex mechanism. The only truly inherently safe reactor is a liquid-core reactor, like the molten salt reactor that was created at Oak Ridge in the 1960s. For the purposes of a reactor designer, liquid—whether it’s water, liquid metal, or some type of liquid fluoride — has a marvelous characteristic: it expands rapidly when it gets hot. All materials expand when heated, of course. In a liquid-core reactor, as the energy of the liquid rises, it expands and naturally, passively, slows down the reaction, making a runaway accident nearly impossible. In technical terms, this is known as a “negative temperature coefficient of reactivity.” That means that as the temperature rises (which typically is what happens when something goes wrong in a nuclear reactor), the reactivity goes down. When the reactivity goes down, the reactor is essentially turning itself off. Liquid fuels have several other characteristics that make them safer than conventional solid fuel reactors. This is where the benefits of thorium, which for a variety of reasons is uniquely well suited to liquid fuel reactors, extend beyond the nature of the element itself. No matter how you use it—in a light-water reactor, in a pebble bed reactor— thorium offers advantages over uranium. But in a liquid fuel reactor, that advantage is magnified. If you put high-octane gas in a 1975 Ford Pinto, you’ll see some marginal performance enhancement. To get the full benefit, though, you should put it in a Ferrari Testarossa. Using thorium in a liquid fuel reactor is similar: its unique qualities as an energy source are fully exploited. For example, in liquids—particularly in molten salts—fission products tend to be stable, making it easier to isolate and remove them. One of these fission products, xenon-135, is a nuclear poison that tends to build up in conventional reactors, slowing down the reactions. It renders the fuel unusable after only a small percentage of the potential energy has been used, and it’s hideously difficult to handle as part of the nuclear waste stream. In fluid fuels, because xenon forms a noble gas (one that is impervious to chemical reactions), xenon is easy to remove. In a LFTR it can be boiled off as a gas and processed while the reactor continues operating, reducing downtime and increasing the amount of the potential energy that can be extracted from the thorium fuel. A ton of thorium can produce energy equivalent to that produced by 200 tons of uranium in a conventional light-water reactor. Liquid fuels are also impervious to radiation damage, solving one of the thorniest problems in solid fuel reactors. Continuous bombardment by neutrons over periods of weeks or months wears down not only the solid uranium pellets in a light-water reactor but also the cladding (usually made of zirconium) that contains them. Because of radiation damage and the buildup of fission poisons like xenon, fuel rods age quickly; they have to be replaced every few years, even though only 3 to 5 percent of their energy has been consumed. Liquid fuels have one other characteristic that makes them ideal for reactor cores: they flow. Gravity, not elaborate control systems or socalled passive safety systems, gives LFTRs their ultimate protection against a serious nuclear accident. In a criticality accident (i.e., if the fission reaction in the core starts to get out of control), a specially designed freeze plug in the reactor vessel melts and the liquid core simply drains out of the reactor into an underground shielded container, like a bathtub when the drain plug is pulled. The fission reactions quickly cease, and (thanks to the expansive quality noted earlier) the fluid cools rapidly. Decay heat is contained harmlessly. Meltdown is impossible, and there are no solid fuel rods too radioactive to remove. Inherently safe, LFTRs pose less threat than light-water reactors, coal-fired power plants, oil refineries, or just about any other form of large energy or chemical plant. Built small and modular, they will be less expensive to build and operate than just about any other energy source. ---- FINALLY YOU’D FUEL YOUR SMALL, breeding, inherently safe, liquidcore reactor with thorium. I mentioned in chapters 1 and 2 many of thorium’s sterling qualities as a nuclear fuel; they bear reviewing. It is abundant. In fact, used properly, it’s effectively inexhaustible. It requires no special refining or processing beyond purifying it from the monazite ore in which it is most commonly found. It can be mined safely, with none of the tailings and other results of uranium mining that, in the early years of the Atomic Age, poisoned whole communities in Russia and the United States. It’s no good for making weapons. In fact, it’s not fissile at all. It requires a kind of nuclear alchemy to be transmuted into uranium-233, which is a more efficient and safe source of energy than U-235. Finally reactors based on thorium—or, rather, U-233, into which thorium transforms in a nuclear reactor—consume far more of the latent energy trapped inside the fuel, vastly reducing or even eliminating the problem of nuclear waste. In short, you’d build a liquid fluoride thorium reactor, or LFTR. LFTRs are the first truly revolutionary reactor design to come along since the development in the 1960s of the molten salt reactor, progenitor of the LFTR. LFTRs are designed with an outer blanket of liquid fluoride that contains dissolved thorium-232—thorium tetrafluoride, to be precise (a fluoride is simply a combination of fluorine and another element; tetrafluoride means four atoms of fluorine). The thorium is borne in a solution of lithium and beryllium fluorides that has maximum heat-transfer properties, making it a supremely efficient coolant. This radioactive cocktail surrounds a core of uranium-233 that is produced from the natural decay of Th-232 bombarded by neutrons. The neutron source, to start the reaction, is typically a small amount of fissile uranium, although the neutrons can also come from a particle accelerator, of the sort used in physics experiments to smash particles together. The blanket and inner core are in two concentric containers. It’s essentially a double boiler: the inner core, sheathed in an exotic alloy of a metal such as zirconium, contains the fissile U-233, and the outer shell, or blanket, contains the fertile thorium. In this simplified diagram of a liquid fluoride thorium reactor, thorium is converted to uranium-233, which sustains the fission reaction, heating a secondary liquid that powers a turbine to create electricity. (Brad Nielsen) Once the reactor core goes critical, the fission reactions in the core continuously throw off neutrons that keep the thorium, in the blanket, in a constant state of transformation, creating a virtuous cycle. Such a plant has two separate loops of piping: one carries the fertile thorium tetrafluoride salt, once it has been sufficiently bombarded to start the decay chain, into a decay tank from which U-233 can be transferred to the inner core; the other sends the hot U-233 salt from the core to a heat exchanger to drive a steam turbine.7 There are several variations on this basic design, which use various fluids to transfer heat from the reactor core to the turbine; suffice it to say that whichever is chosen, it will be significantly more efficient than a conventional nuclear plant. After passing through the heat exchanger, the second loop, carrying hot U-233 fuel salt, cycles back into the core, with a small secondary side stream passing through a reprocessor, where the fission products are removed, preventing them from poisoning the reaction, before being cycled back into the core for further fission reactions. Because the core is liquid, it operates at atmospheric pressure, meaning that the extremely thick-walled, pressurized vessels used in conventional reactors, which have an unfortunate tendency to blow their top, are unnecessary. Because LFTRs consume virtually all their nuclear fuel, the majority of the waste products are not long-lived fissile material but rather fission products, about 83 percent of which are safe within a decade. While LFTRs, like every other nuclear reactor, generate fission products that are highly radioactive, their half-lives tend to be measured in dozens of years, not thousands. The long-lived radioactivity of LFTR waste is one ten-thousandth that of a conventional reactor. The leftovers, a small fraction of the waste produced by conventional reactors, must be stored in radiation-proof geological sites for about three centuries, compared with ten thousand years for nuclear waste from conventional uranium reactors. In fact, LFTRs themselves make great garbage dumps for spent nuclear fuel: they can refine standard nuclear waste into LFTR by-products, essentially solving the currently intractable toxic waste storage problems that plague today’s nuclear power industry. Thorium Energy Alliance This schematic shows a full thorium power plant including a reactor vessel, drain tanks, and a Brayton-cycle turbine using supercritical carbon dioxide. (Thorium Energy Alliance) With their high negative temperature coefficient, LFTRs are impervious to sudden overheating. They’re also exquisitely tunable; the concentration of fuel in the outer blanket can be adjusted continually, making it easy to control the reactivity in the core. Finally, they can run practically forever. The reactions in a LFTR produce enough excess neutrons to breed their own fuel. LFTRs are the only type of reactor that can breed more fuel than they consume in the thermal, or lower-energy, spectrum. They have the virtues of fast breeders without the volatility. Here it is useful to think back to the nature of fission and neutron absorption. In today’s conventional reactors, the great majority of the fuel is U-238, which transmutes to the transuranic element plutonium- 239 when the U-238 absorbs a single neutron. Thorium-232, by contrast, requires five neutrons to become a transuranic (neptunium-237, which can be safely burned down, or processed, in the reactor). That too makes LFTRS inherently safer than solid-fuel uranium reactors. While liquid-core reactors can be built to operate without moderators, in some LFTR designs the core does use moderators — typically graphite rods, just as in a conventional uranium reactor. Just as the LFTR has unique qualities that make it superior to light-water reactors, though, U-233 has some distinct advantages over uranium- 235, the fissile material that runs the vast majority of the world’s nuclear power stations today. U-233 displays a quality that nuclear engineers love: high neutron economy, usually expressed as q in physics equations. That means that an atom of U-233, after absorbing a stray neutron and fissioning, produces on average 2.16 neutrons. Since one neutron is required to continue the chain reaction, 1.16 neutrons are freed up to produce new fuel. Overall, LFTRs are 200 to 300 times more fuel efficient than standard reactors. They are safer, simpler, smaller, less expensive to build, and less expensive to run to produce electricity on a cost-per-kilowatt basis.

#### And, new tech developments make thorium LFTR’s expandable

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Small modular LFTRs can be mass produced. Commercialization of technology leads to lower costs as the number of units increase. Experience benefits arise from work specialization, new processes, product standardization, new technologies, and product redesign. Business economists observe that doubling the number of units produced reduces cost by a percentage termed the learning ratio, seen in the early aircraft industry to be 20%. Today Moore’s law in the computer industry illustrates a learning ratio of 50%. In The Economic Future of Nuclear Power University of Chicago economists more conservatively estimate the learning ratio is 10% for nuclear power reactors. Units produced The learning curve In this illustration, the cost of the 1024th LFTR would be about 35% the cost of the first commercial LFTR. Some engineers advocate economy-of-scale to justify large reactors, but this analysis shows that 100 MW units would have a 30% costadvantage over 1000 MW units because of the ten times more production experiences. Boeing 737 production line Boeing made 477 airplanes in 2011 costing up to $330 million each. Boeing, capable of manufacturing $200 million units daily, is a model for LFTR production. Airplane manufacturing has many of the same critical issues as manufacturing nuclear reactors: life safety, reliability, strength¶ of materials, corrosion, regulatory compliance, documentation, design control, supply chain management, and cost, for example. Reactors of 100 MW size costing $200 million can similarly be factory produced. Manufacturing more, smaller reactors traverses the learning curve more rapidly. Producing one per day for 3 years creates 1,095 production experiences, reducing costs by 65%. Documentation control integrated with manufacturing saves costs and increases accuracy. New manufacturing techniques are enabled with CAM (computer aided manufacturing), automatically converting designs to manufacturing instructions for machine tools and industrial robots. CAM can vary manufacturing parts and processes to produce a variety of units on one production line. In the Boeing photograph above, observe that the wing tips are not identical on all units. Ongoing research will lead to lower LFTR costs. Cost reductions are presaged by current engineering research. Compact, thin-plate heat exchangers may reduce fluid inventories, size, and cost. Possible new materials include silicon-impregnated carbon fiber with chemical vapor infiltrated carbon surfaces, and higher temperature nickel alloys. Operating at 950°C can increase thermal/electrical conversion efficiency beyond 50%. Such high temperatures can improve efficiency for water dissociation to create hydrogen, to lower manufacturing costs of synthetic fuels such as methanol or dimethyl ether that can substitute for gasoline or diesel oil. Initial fissile material quantities and costs are low. A 100 MW LFTR requires only about 100 kg of fissile material, such as U-233 or U-235, to start up. Thereafter it is fueled by thorium, or thorium and enriched uranium in DMSR. A LWR or LMFBR requires 5 times this, adding to capital costs. Thorium fuel is plentiful and inexpensive. One ton of thorium can power a 1,000 megawatt LFTR for a year - enough power for a city. Just 500 tons would supply all US electric energy for a year. Fuel costs at $300,000 per ton for thorium would be $0.00004/kWh, compared to coal at $0.03/kWh. Uranium enrichment costs are low. The expanding worldwide fleet of LWRs increases demand for uranium and also for the enrichment services to convert it from 0.7% to 4% U-235. Some LFTRs may require enriched uranium only for startup. Designs such as DMSRs will require a continued supply of enriched uranium, but less than 25% of the amount used by LWRs. Fuel fabrication costs are low. Unlike LWRs, there are no costs for producing high quality zirconium tube fuel rods to contain UO2 pellets and their fission products for centuries. Unlike pebble bed reactors using TRISO particle fuel, there is no cost for triple-coating millions of UO2 particles designed to retain fission products within the three redundant layers. The LFTR fuel supply form might be solid UF4 crystals or gaseous UF6, which are already intermediate, steps in the production of solid UO2 used in LWRs. New control system technologies can reduce labor costs. The number of people required to operate today’s LWRs is higher than for other forms of power production. Nuclear power plants operate 24x7, and each job employs 6 people: 4 for the 4 work shifts per week, 1 for vacation and sick leave, and 1 for training time, so labor costs mount up. In my visits I observed there are more than 1000 employees per GW of power output, adding about 1 cent/kWh to electricity costs. Information systems and control systems technologies have improved immensely since LWRs were designed in the 1970s. Safety critical software techniques enable low-labor-cost operation of aircraft, helicopters, and rapid transit. Reducing direct operator control of reactors can also avoid mistakes, such as the series of operator errors that led to the Chernobyl disaster. Security guard costs should be proportional to the possible damage threat, much lower with a non-pressurized LFTR. Even US ICBMs in missile silos were guarded with remote electronic surveillance. Transmission line costs are less with distributed LFTRs. Much of the costs associated with multi-GW power plants are for transmission lines to transport power hundreds of miles on low- loss high-voltage direct-current (HVDC) lines. Fewer transmission lines are required when 100 MW power sources such as LFTRs are near cities and manufacturing centers. Costs for HVDC lines are roughly $1 million per mile, so the costs for energy transmission over 1,000 miles is roughly 1 cent/kWh. The program objective must be energy cheaper than coal. For all the above reasons, low costs of $2/W and 3 cents/kWh is an achievable objective. A $2/watt capital cost contributes $0.02/kWh to the power cost, assuming a 40 year life, 8% interest rate, and 90% capacity factor. With plentiful, inexpensive thorium fuel, LFTR can generate electricity at <$0.03/kWh, underselling power generated by burning coal. Producing one LFTR of 100 MW size per day could phase out all coal-burning power plants worldwide in 38 years, ending 10 billion tons of CO2 emissions from world coal plants now supplying 1,400 GW of electric power. Low LFTR costs are crucial to this coal replacement strategy, achievable if cost objectives are maintained at every design choice. Less expensive electric power will check global warming by dissuading all nations from burning coal. It will also help developing economies to improve their prosperity, encouraging lifestyles with sustainable birthrates. Keeping LFTR energy costs cheaper than coal is critical to achieving the social and environmental benefits. Cost challenges can be met at the R&D stage. There are cost challenges for LFTR development. Meeting the production cost objectives of $2/W and 3 cents/kWh requires a well-executed research and development program. Corporations with deep pockets may develop advanced nuclear power, as evidenced by Bill Gates’ investment in Terrapower’s LMFBR reactor, building on prior US $16 billion R&D expenditures. There is an opportunity for substantial government or philanthropic investment in LFTR R&D to keep ultimate production costs low by removing amortization of imprecise R&D costs. Public investment in energy R&D is a much more effective public policy than ongoing alternative energy production subsidies being paid today. ¶

#### And, the level of investment is key

The Economist, 09 [Nuclear's next generation inside story: A group of six new blueprints for nuclear power stations promise advances in safety and efficiency. How do they differ from existing designs?, <http://www.economist.com/node/15048703>]

Dr Ferguson thinks the prospects of the entire generation-IV programme are contingent on the level of investment allocated to nearer-term projects. “Do we commit to generation III or do we leapfrog to generation IV?” he asks. Two important considerations for answering his question are regulatory compliance and economic viability. With regard to the former, the NEA's Multinational Design Evaluation Programme is considering an international licensing scheme to standardise safety requirements for the new reactors. As for the latter, the success of generation IV reactors is likely to hinge on large amounts of government support. In the near term this support should take the form of increased research-and-development funding, says Dr Stacey of Georgia Tech. In the longer term, governments have an important role to play in the provision of loan guarantees, which are vital for overcoming engineering and “first of a kind” risks, says Joe Turnage at Unistar, a commercial nuclear joint-venture between Constellation Energy, an American utility, and EDF, a French one. But whatever the next generation of nuclear power-stations looks like, it is clear that the research being done around the world to develop such a variety of new reactors, rather than new nuclear weapons, has fulfilled Eisenhower's wish, back in 1953, that “the miraculous inventiveness of man shall not be dedicated to his death, but consecrated to his life.”

#### Loan guarantees now, but they are insufficient

Squassoni 12 Sharon, Director and Senior Fellow of the Proliferation Prevention Program at CSIS, “NUCLEAR POWER IN THE GLOBAL ENERGY PORTFOLIO”, Federation of American Scientists, February, www.fas.org/pubs/\_docs/Nuclear\_Energy\_Report-lowres.pdf

The U.S. nuclear industry has singled out government loan guarantees as essential because the private market finds loans for nuclear power plants to be too risky, and U.S. utilities are too small to take on a bigger equity to debt ratio, which would lower the cost of capital, a key element in the cost of the new plants. Under the loan guarantee program, the U.S. Treasury will guarantee 100 percent of a loan which is limited to 80 percent of the construction costs. This effectively transfers the risk of cost overruns due to lengthier construction times from project owners to the taxpayer. Congress appropriated $18.5 billion in loan guarantees for nuclear power facilities, and President Obama has recommended tripling this to $54 billion. This still falls far short of the $122 billion in requests. Industry sources suggest DOE will be able to support no more than 2-4 reactors, given costs of $5 billion to $12 billion per reactor. e Department of Energy awarded the first loan guarantee to the Vogtle reactor project in Georgia (over $8 billion) in 2010.

Federal loan guarantees causes market expansion – catalyzes capital investment

I21CE 11 Institute for 21st Century Energy, Mission of the U.S. Chamber of Commerce Institute for 21st Century Energy is to unify policymakers, regulators, business leaders, and the American public behind a common sense energy strategy to help keep America secure, prosperous, and clean, "Commit to and Expand Nuclear Energy Use", 2011 is copyright date, www.energyxxi.org/commit-and-expand-nuclear-energy-use

Nuclear power is currently an emissions-free source of 20% of America’s electricity supply, despite our not having licensed the construction of a nuclear power facility in nearly 30 years. Expansion of new nuclear power assets is essential to meet our projected growing demand while mitigating our emissions of CO2. As required by law, the federal government must provide authorized fiscal incentives for new nuclear power plants. We must solve our long-term nuclear waste challenges and aggressively expand efforts to recycle used nuclear fuel. Nuclear power is the nation’s largest emissions-free source of electricity. From a life-cycle perspective—including the impacts of uranium mining, uranium enrichment, fuel fabrication, plant construction, and fuel disposal—nuclear power offers a huge emissions advantage over any other large-scale method of baseload power generation and is on par with renewable sources. Nuclear power currently supplies about 20% of America’s electricity supply. America’s 104 operating nuclear power reactors are also the cheapest source of baseload electricityon a per-kilowatt-hour basis because operational and fuel costs are comparatively low. Although the existing nuclear units are successfully renewing their operating licenses for an additional 20 years, new nuclear power plants are essential to meet growing demand while avoiding GHG emissions. New nuclear power plants are capital-intensive, requiring an estimated $6–8 billion (2008 dollars) per plant. The U.S. electric power sector consists of many relatively small companies that do not have the size, financing capability, or financial strength to fund power projects of this scale on their own, in the numbers required. Outside financial support is necessary. The loan guarantee program authorized by EPAct2005 is a crucial tool to enable utilities to finance the construction of new reactors by increasing access to capital and enabling a higher share of leveraged debt. DOE estimates that by enabling a utility to rely more heavily on private debt than more expensive equity, a federal loan guarantee may save the ratepayers nearly 40% in the cost of power from a new nuclear plant. A well-managed loan guarantee program will be funded by project applicants and not require any expenditure of government funds. Unfortunately, the loan guarantee program has not been implemented effectively by the DOE, and the $18.5 billion in loan volume authorized by Congress for nuclear power projects is inadequate, given the estimated cost of a new nuclear power plant. That loan volume will support, at best, two, or three new projects. The current program should be expanded, and at the appropriate time merged with the Clean Energy Bank of the United States discussed earlier. The time it takes to license and build a nuclear power plant—now estimated at a minimum of eight years—is one reason the financing costs are high. The Nuclear Regulatory Commission (NRC) estimates it will take three and one-half years to review the first wave of new license applications for new designs. This period must be reduced for subsequent applications without compromising safety, and Congress must ensure the NRC has adequate resources to process license applications as expeditiously as possible. The regulatory and licensing framework has improved significantly since the 1980s, when we saw completed plants sit idle while awaiting issuance of operating licenses, but the NRC has yet to issue a Construction and Operating License under the new process. Project sponsors and investors have significant questions about whether the new process will deliver timely approvals. Delays in starting up a completed plant will subject its owners to substantial financial costs. The standby support program, established in EPAct2005, could be an effective insurance policy for nuclear plant owners against delays in the regulatory process or from litigation outside of the plant owner’s control. While this is a potentially useful tool to encourage first-movers to test the process, several changes are necessary to broaden the scope of the coverage. As currently structured, the statutory liability cap is now too low and does not reflect today’s market costs.

#### And, loan guarantees reduce financial uncertainty and boost investment

Adams 10—Publisher of Atomic insights Was in the Navy for 33 years Spent time at the Naval Academy Has experience designing and running small nuclear plants (Rod, Concrete Action to Follow Strongly Supportive Words On Building New Nuclear Power Plants, atomicinsights.com/2010/01/concrete-action-to-follow-strongly-supportive-words-on-building-new-nuclear-power-plants.html)

Loan guarantees are important to the nuclear industry because the currently available models are large, capital intensive projects that need a stable regulatory and financial environment. The projects can be financed because they will produce a regular stream of income that can service the debt and still provide a profit, but that is only true if the banks are assured that the government will not step in at an inopportune time to halt progress and slow down the revenue generation part of the project. Bankers do not forget history or losses very easily; they want to make sure that government decisions like those that halted Shoreham, Barnwell’s recycling facility or the Clinch River Breeder Reactor program are not going to be repeated this time around. For the multi-billion dollar projects being proposed, bankers demand the reassurance that comes when the government is officially supportive and has some “skin in the game” that makes frivolous bureaucratic decisions to erect barriers very expensive for the agency that makes that decision. I have reviewed the conditions established for the guarantee programs pretty carefully – at one time, my company ([Adams Atomic Engines, Inc.](http://www.atomicengines.com)) was considering filing an application. The loan conditions are strict and do a good job of protecting government interests. They were not appropriate for a tiny company, but I can see where a large company would have less trouble complying with the rules and conditions. The conditions do allow low or no cost intervention in the case of negligence or safety issues, but they put the government on the hook for delays that come from bad bureaucratic decision making.

#### Government support is vital-~--it overcomes financial barriers to nuclear that the market cannot

Yanosek 12 Kassia, entrepreneur-in-residence at Stanford University’s Steyer-Taylor Center for Energy Policy and Finance and a private equity investor in the energy sector as a principal at Quadrant Management and Founder of Tana Energy Capital LLC, " Financing Nuclear Power in the US", Spring, energyclub.stanford.edu/index.php/Journal/Financing\_Nuclear\_Power\_by\_Kassia\_Yanosek

Over the course of the last decade, it appeared that concerns about carbon emissions, aging coal fleets, and a desire for a diversified generation base were reviving the U.S. utility sector interest in building new nuclear plants. Government and companies worked closely on design certification for Generation III reactors, helping to streamline the licensing process. New loan guarantees from the federal government targeted for nuclear projects were created as part of the 2005 Energy Policy Act. Consequently, dozens of projects entered the planning stages. Following more than 30 years in which no new units were built, it looked as if the U.S. nuclear industry was making significant headway. However, it is yet to be seen how many new nuclear projects will actually make it beyond blueprints due to one of the largest barriers to new nuclear construction: financing risk. Large upfront capital costs, a complex regulatory process, uncertain construction timelines, and technology challenges result in a risk/return profile for nuclear projects that is unattractive for the capital markets without supplementary government or ratepayer support. To many investors, nuclear seems too capital-intensive. Nuclear energy has attractive qualities in comparison to other sources of electricity. A primary motivation to pursue the development of nuclear energy in the U.S. has been its low operating fuel costs compared with coal, oil, and gas-fired plants. Over the lifetime of a generating station, fuel makes up 78% of the total costs of a coal-fired plant. For a combined cycle gas-fired plant, the figure is 89%. According to the Nuclear Energy Institute, the costs for nuclear are approximately 14%, and include processing, enrichment, and fuel management/disposal costs. Today’s low natural gas prices have enhanced the prospects of gas-fired power, but utilities still remain cautious about over-investing in new natural gas generation given the historical volatility of prices. Furthermore, nuclear reactors provide baseload power at scale, which means that these plants produce continuous, reliable power to consistently meet demand. In contrast, renewable energies such as wind or solar are only available when the wind blows or the sun shines, and without storage, these are not suitable for large-scale use. Finally, nuclear energy produces no carbon emissions, which is an attractive attribute for utilities that foresee a carbon tax being imposed in the near future. Given nuclear’s benefits, one may wonder why no new nuclear units have been ordered since the 1970s. This hiatus is in great part due to nuclear’s high cost comparative to other alternatives, and its unique set of risks. As a result, financing nuclear has necessitated government involvement, as the cost of nuclear typically exceeds that of the cost of conventional generation technologies such as coal and natural gas fired generation on a levelized cost of energy (LCOE) basis. LCOE represents the present value of the total cost of building and operating a generating plant over its financial life, converted to equal annual payments and amortized over expected annual generation, and is used to compare across different power generation technologies. For both regulated utilities and independent power producers, nuclear is unattractive if the levelized cost exceeds that of other technologies, since state utility commissions direct regulated utilities to build new capacity using the technology with the lowest LCOE. Furthermore, capital costs are inherently high, ranging in the billions or tens of billions of dollars, and are compounded by financing charges during long construction times. Without government support, financing nuclear is currently notpossible in the capital markets. Recently, Constellation Energy and NRG separately pulled the plug on new multi-billion dollar plants, citing financing problems. Projects, however, will get done on a one-off basis. Southern Company’s Vogtle Plant in Eastern Georgia is likely to be the sponsor of the first new generation to be constructed, taking advantage of local regulatory and federal support. Two new reactors of next-generation technology are in the permitting stage, which will bring online 2,200 megawatts (MW) of new capacity, and will cost $14 billion. The project will take advantage of tax credits and loan guarantees provided in the 2005 Energy Policy Act.

#### The impact is extinction

Kroenig, 12 [May 26th, Matthew Kroenig: Assistant Professor of Government, Georgetown University and Stanton Nuclear Security Fellow, Council on Foreign Relations, The History of Proliferation Optimism: Does It Have A Future? Prepared for the Nonproliferation Policy Education Center, <http://www.npolicy.org/article.php?aid=1182&tid=30>]

Proliferation Optimism: Proliferation optimism was revived in the academy in Kenneth Waltz’s 1979 book, Theory of International Politics.[[30]](#footnote-30)[29] In this, and subsequent works, Waltz argued that the spread of nuclear weapons has beneficial effects on international politics. He maintained that states, fearing a catastrophic nuclear war, will be deterred from going to war with other nuclear-armed states. As more and more states acquire nuclear weapons, therefore, there are fewer states against which other states will be willing to wage war. The spread of nuclear weapons, according to Waltz, leads to greater levels of international stability. Looking to the empirical record, he argued that the introduction of nuclear weapons in 1945 coincided with an unprecedented period of peace among the great powers. While the United States and the Soviet Union engaged in many proxy wars in peripheral geographic regions during the Cold War, they never engaged in direct combat. And, despite regional scuffles involving nuclear-armed states in the Middle East, South Asia, and East Asia, none of these conflicts resulted in a major theater war. This lid on the intensity of conflict, according to Waltz, was the direct result of the stabilizing effect of nuclear weapons. Following in the path blazed by the strategic thinkers reviewed above, Waltz argued that the requirements for deterrence are not high. He argued that, contrary to the behavior of the Cold War superpowers, a state need not build a large arsenal with multiple survivable delivery vehicles in order to deter its adversaries. Rather, he claimed that a few nuclear weapons are sufficient for deterrence. Indeed, he even went further, asserting that any state will be deterred even if it merely suspects its opponent might have a few nuclear weapons because the costs of getting it wrong are simply too high. Not even nuclear accident is a concern according to Waltz because leaders in nuclear-armed states understand that if they ever lost control of nuclear weapons, resulting in an accidental nuclear exchange, the nuclear retaliation they would suffer in response would be catastrophic. Nuclear-armed states, therefore, have strong incentives to maintain control of their nuclear weapons. Not even new nuclear states, without experience in managing nuclear arsenals, would ever allow nuclear weapons to be used or let them fall in the wrong hands. Following Waltz, many other scholars have advanced arguments in the proliferation optimist school. For example, Bruce Bueno de Mesquite and William Riker explore the “merits of selective nuclear proliferation.”[[31]](#footnote-31)[30] John Mearsheimer made the case for a “Ukrainian nuclear deterrent,” following the collapse of the Soviet Union.[[32]](#footnote-32)[31] In the run up to the 2003 Gulf War, John Mearsheimer and Steven Walt argued that we should not worry about a nuclear-armed Iraq because a nuclear-armed Iraq can be deterred.[[33]](#footnote-33)[32] And, in recent years, Barry Posen and many other realists have argued that nuclear proliferation in Iran does not pose a threat, again arguing that a nuclear-armed Iran can be deterred.[[34]](#footnote-34)[33] What’s Wrong with Proliferation Optimism? The proliferation optimist position, while having a distinguished pedigree, has several major problems. Many of these weaknesses have been chronicled in brilliant detail by Scott Sagan and other contemporary proliferation pessimists.[[35]](#footnote-35)[34] Rather than repeat these substantial efforts, I will use this section to offer some original critiques of the recent incarnations of proliferation optimism. First and foremost, proliferation optimists do not appear to understand contemporary deterrence theory. I do not say this lightly in an effort to marginalize or discredit my intellectual opponents. Rather, I make this claim with all due caution and with complete sincerity. A careful review of the contemporary proliferation optimism literature does not reflect an understanding of, or engagement with, the developments in academic deterrence theory in top scholarly journals such as the American Political Science Review and International Organization over the past few decades.[[36]](#footnote-36)[35] While early optimists like Viner and Brodie can be excused for not knowing better, the writings of contemporary proliferation optimists ignore the past fifty years of academic research on nuclear deterrence theory. In the 1940s, Viner, Brodie, and others argued that the advent of Mutually Assured Destruction (MAD) rendered war among major powers obsolete, but nuclear deterrence theory soon advanced beyond that simple understanding.[[37]](#footnote-37)[36] After all, great power political competition does not end with nuclear weapons. And nuclear-armed states still seek to threaten nuclear-armed adversaries. States cannot credibly threaten to launch a suicidal nuclear war, but they still want to coerce their adversaries. This leads to a credibility problem: how can states credibly threaten a nuclear-armed opponent? Since the 1960s academic nuclear deterrence theory has been devoted almost exclusively to answering this question.[[38]](#footnote-38)[37] And, unfortunately for proliferation optimists, the answers do not give us reasons to be optimistic. Thomas Schelling was the first to devise a rational means by which states can threaten nuclear-armed opponents.[[39]](#footnote-39)[38] He argued that leaders cannot credibly threaten to intentionally launch a suicidal nuclear war, but they can make a “threat that leaves something to chance.”[[40]](#footnote-40)[39] They can engage in a process, the nuclear crisis, which increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. As states escalate a nuclear crisis there is an increasingprobability that the conflict will spiral out of control and result in an inadvertent or accidental nuclear exchange. As long as the benefit of winning the crisis is greater than the incremental increase in the risk of nuclear war, threats to escalate nuclear crises are inherently credible. In these games of nuclear brinkmanship, the state that is willing to run the greatest risk of nuclear war before back down will win the crisis as long as it does not end in catastrophe. It is for this reason that Thomas Schelling called great power politics in the nuclear era a “competition in risk taking.”[[41]](#footnote-41)[40] This does not mean that states eagerly bid up the risk of nuclear war. Rather, they face gut-wrenching decisions at each stage of the crisis. They can quit the crisis to avoid nuclear war, but only by ceding an important geopolitical issue to an opponent. Or they can the escalate the crisis in an attempt to prevail, but only at the risk of suffering a possible nuclear exchange. Since 1945 there were have been many high stakes nuclear crises (by my count, there have been twenty) in which “rational” states like the United States run a risk of nuclear war and inch very close to the brink of nuclear war.[[42]](#footnote-42)[41] By asking whether states can be deterred or not, therefore, proliferation optimists are asking the wrong question. The right question to ask is: what risk of nuclear war is a specific state willing to run against a particular opponent in a given crisis? Optimists are likely correct when they assert that Iran will not intentionally commit national suicide by launching a bolt-from-the-blue nuclear attack on the United States or Israel. This does not mean that Iran will never use nuclear weapons, however. Indeed, it is almost inconceivable to think that a nuclear-armed Iran would not, at some point, find itself in a crisis with another nuclear-armed power and that it would not be willing to run any risk of nuclear war in order to achieve its objectives. If a nuclear-armed Iran and the United States or Israel have a geopolitical conflict in the future, over say the internal politics of Syria, an Israeli conflict with Iran’s client Hezbollah, the U.S. presence in the Persian Gulf, passage through the Strait of Hormuz, or some other issue, do we believe that Iran would immediately capitulate? Or is it possible that Iran would push back, possibly even brandishing nuclear weapons in an attempt to deter its adversaries? If the latter, there is a real risk that proliferation to Iran could result in nuclear war. An optimist might counter that nuclear weapons will never be used, even in a crisis situation, because states have such a strong incentive, namely national survival, to ensure that nuclear weapons are not used. But, this objection ignores the fact that leaders operate under competing pressures. Leaders in nuclear-armed states also have very strong incentives to convince their adversaries that nuclear weapons could very well be used. Historically we have seen that in crises, leaders purposely do things like put nuclear weapons on high alert and delegate nuclear launch authority to low level commanders, purposely increasing the risk of accidental nuclear war in an attempt to force less-resolved opponents to back down. Moreover, not even the optimists’ first principles about the irrelevance of nuclear posture stand up to scrutiny. Not all nuclear wars would be equally devastating.[[43]](#footnote-43)[42] Any nuclear exchange would have devastating consequences no doubt, but, if a crisis were to spiral out of control and result in nuclear war, any sane leader would rather be facing a country with five nuclear weapons than one with thirty-five thousand. Similarly, any sane leader would be willing to run a greater risk of nuclear war against the former state than against the latter. Indeed, systematic research has demonstrated that states are willing to run greater risks and, therefore, more likely to win nuclear crises when they enjoy nuclear superiority over their opponent.[[44]](#footnote-44)[43] Proliferation optimists miss this point, however, because they are still mired in 1940s deterrence theory. It is true that no rational leader would choose to launch a nuclear war, but, depending on the context, she would almost certainly be willing to risk one. Nuclear deterrence theorists have proposed a second scenario under which rational leaders could instigate a nuclear exchange: a limited nuclear war.[[45]](#footnote-45)[44] By launching a single nuclear weapon against a small city, for example, it was thought that a nuclear-armed state could signal its willingness to escalate the crisis, while leaving its adversary with enough left to lose to deter the adversary from launching a full-scale nuclear response. In a future crisis between a nuclear-armed China and the United States over Taiwan, for example, China could choose to launch a nuclear attack on Honolulu to demonstrate its seriousness. In that situation, with the continental United States intact, would Washington choose to launch a full-scale nuclear war on China that could result in the destruction of many more American cities? Or would it back down? China might decide to strike hoping that Washington will choose a humiliating retreat over a full-scale nuclear war. If launching a limited nuclear war could be rational, it follows that the spread of nuclear weapons increases the risk of nuclear use. Again, by ignoring contemporary developments in scholarly discourse and relying exclusively on understandings of nuclear deterrence theory that became obsolete decades ago, optimists reveal the shortcomings of their analysis and fail to make a compelling case. The optimists also error by confusing stability for the national interest. Even if the spread of nuclear weapons contributes to greater levels of international stability (which discussions above and below suggest it might not) it does not necessarily follow that the spread of nuclear weapons is in the U.S. interest. There might be other national goals that trump stability, such as reducing to zero the risk of nuclear war in an important geopolitical region. Optimists might argue that South Asia is more stable when India and Pakistan have nuclear weapons, but certainly the risk of nuclear war is higher than if there were no nuclear weapons on the subcontinent. In addition, it is wrong to assume that stability is always in the national interest. Sometimes it is, but sometimes it is not. If stability is obtained because Washington is deterred from using force against a nuclear-armed adversary in a situation where using force could have advanced national goals, stability harms, rather than advances, U.S. national interests. The final gaping weakness in the proliferation optimist argument, however, is that it rests on a logical contradiction. This is particularly ironic, given that many optimists like to portray themselves as hard-headed thinkers, following their premises to their logical conclusions. But, the contradiction at the heart of the optimist argument is glaring and simple to understand: either the probability of nuclear war is zero, or it is nonzero, but it cannot be both. If the probability of nuclear war is zero, then nuclear weapons should have no deterrent effect. States will not be deterred by a nuclear war that could never occur and states should be willing to intentionally launch large-scale wars against nuclear-armed states. In this case, proliferation optimists cannot conclude that the spread of nuclear weapons is stabilizing. If, on the other hand, the probability of nuclear war is nonzero, then there is a real danger that the spread of nuclear weapons increases the probability of a catastrophic nuclear war. If this is true, then proliferation optimists cannot be certain that nuclear weapons will never be used. In sum, the spread of nuclear weapons can either raise the risk of nuclear war and in so doing, deter large-scale conventional conflict. Or there is no danger that nuclear weapons will be used and the spread of nuclear weapons does not increase international instability. But, despite the claims of the proliferation optimists, it is nonsensical to argue that nuclear weapons will never be used and to simultaneously claim that their spread contributes to international stability. Proliferation Anti-obsessionists: Other scholars, who I label “anti-obsessionists” argue that the spread of nuclear weapons has neither been good nor bad for international politics, but rather irrelevant. They argue that academics and policymakers concerned about nuclear proliferation spend too much time and energy obsessing over something, nuclear weapons, that, at the end of the day, are not all that important. In Atomic Obsession, John Mueller argues that widespread fears about the threat of nuclear weapons are overblown.[[46]](#footnote-46)[45] He acknowledges that policymakers and experts have often worried that the spread of nuclear weapons could lead to nuclear war, nuclear terrorism and cascades of nuclear proliferation, but he then sets about systematically dismantling each of these fears. Rather, he contends that nuclear weapons have had little effect on the conduct of international diplomacy and that world history would have been roughly the same had nuclear weapons never been invented. Finally, Mueller concludes by arguing that the real problem is not nuclear proliferation, but nuclear nonproliferation policy because states do harmful things in the name of nonproliferation, like take military action and deny countries access to nuclear technology for peaceful purposes. Similarly, Ward Wilson argues that, despite the belief held by optimists and pessimists alike, nuclear weapons are not useful tools of deterrence.[[47]](#footnote-47)[46] In his study of the end of World War II, for example, Wilson argues that it was not the U.S. use of nuclear weapons on Hiroshima and Nagasaki that forced Japanese surrender, but a variety of other factors, including the Soviet Union’s decision to enter the war. If the actual use of nuclear weapons was not enough to convince a country to capitulate to its opponent he argues, then there is little reason to think that the mere threat of nuclear use has been important to keeping the peace over the past half century. Leaders of nuclear-armed states justify nuclear possession by touting their deterrent benefits, but if nuclear weapons have no deterrent value, there is no reason, Ward claims, not to simply get rid of them. Finally, Anne Harrington de Santana argues that nuclear experts “fetishize” nuclear weapons.[[48]](#footnote-48)[47] Just like capitalists, according to Karl Marx, bestow magical qualities on money, thus fetishizing it, she argues that leaders and national security experts do the same thing to nuclear weapons. Nuclear deterrence as a critical component of national security strategy, according to Harrington de Santana, is not inherent in the technology of nuclear weapons themselves, but is rather the result of how leaders in countries around the world think about them. In short, she argues, “Nuclear weapons are powerful because we treat them as powerful.”[[49]](#footnote-49)[48] But, she maintains, we could just as easily “defetish” them, treating them as unimportant and, therefore, rendering them obsolete. She concludes that “Perhaps some day, the deactivated nuclear weapons on display in museums across the United States will be nothing more than a reminder of how powerful nuclear weapons used to be.”[[50]](#footnote-50)[49] The anti-obsessionists make some thought-provoking points and may help to reign in some of the most hyperbolic accounts of the effect of nuclear proliferation. They remind us, for example, that our worst fears have not been realized, at least not yet. Yet, by taking the next step and arguing that nuclear weapons have been, and will continue to be, irrelevant, they go too far. Their arguments call to mind the story about the man who jumps to his death from the top of a New York City skyscraper and, when asked how things are going as he passes the 15th story window, replies, “so far so good.” The idea that world history would have been largely unchanged had nuclear weapons not been invented is a provocative one, but it is also unfalsifiable. There is good reason to believe that world history would have been different, and in many ways better, had certain countries not acquired nuclear weapons. Let’s take Pakistan as an example. Pakistan officially joined the ranks of the nuclear powers in May 1998 when it followed India in conducting a series of nuclear tests. Since then, Pakistan has been a poster child for the possible negative consequences of nuclear proliferation. Pakistan’s nuclear weapons have led to further nuclear proliferation as Pakistan, with the help of rogue scientist A.Q. Khan, transferred uranium enrichment technology to Iran, Libya, and North Korea.[[51]](#footnote-51)[50] Indeed, part of the reason that North Korea and Iran are so far along with their uranium enrichment programs is because they got help from Pakistan. Pakistan has also become more aggressive since acquiring nuclear weapons, displaying an increased willingness to sponsor cross-border incursions into India with terrorists and irregular forces.[[52]](#footnote-52)[51] In a number of high-stakes nuclear crises between India and Pakistan, U.S. officials worried that the conflicts could escalate to a nuclear exchange and intervened diplomatically to prevent Armageddon on the subcontinent. The U.S. government also worries about the safety and security of Pakistan’s nuclear arsenal, fearing that Pakistan’s nukes could fall into the hands of terrorists in the event of a state collapse or a break down in nuclear security. And we still have not witnessed the full range of consequences arising from Pakistani nuclear proliferation. Islamabad has only possessed the bomb for a little over a decade, but they are likely to keep it for decades to come, meaning that we could still have a nuclear war involving Pakistan. In short, Pakistan’s nuclear capability has already had deleterious effects on U.S. national security and these threats are only likely to grow over time. In addition, the anti-obsessionists are incorrect to argue that the cure of U.S. nuclear nonproliferation policy is worse than the disease of proliferation. Many observers would agree with Mueller that the U.S. invasion of Iraq in 2003 was a disaster, costing much in the way of blood and treasure and offering little strategic benefit. But the Iraq War is hardly representative of U.S. nonproliferation policy. For the most part, nonproliferation policy operates in the mundane realm of legal frameworks, negotiations, inspections, sanctions, and a variety of other tools. Even occasional preventive military strikes on nuclear facilities have been far less calamitous than the Iraq War. Indeed, the Israeli strikes on nuclear reactors in Iraq and Syria in 1981 and 2007, respectively, produced no meaningful military retaliation and a muted international response. Moreover, the idea that the Iraq War was primarily about nuclear nonproliferation is a contestable one, with Saddam Hussein’s history of aggression, the unsustainability of maintaining the pre-war containment regime indefinitely, Saddam’s ties to terrorist groups, his past possession and use of chemical and biological weapons, and the window of opportunity created by September 11th, all serving as possible prompts for U.S. military action in the Spring of 2003. The claim that nonproliferation policy is dangerous because it denies developing countries access to nuclear energy also rests on shaky ground. If anything, the global nonproliferation regime has, on balance, increased access to nuclear technology. Does anyone really believe that countries like Algeria, Congo, and Vietnam would have nuclear reactors today were it not for Atoms for Peace, Article IV of the NPT, and other appendages of the nonproliferation regime that have provided developing states with nuclear technology in exchange for promises to forgo nuclear weapons development? Moreover, the sensitive fuel-cycle technology denied by the Nuclear Suppliers Group (NSG) and other supply control regimes is not even necessary to the development of a vibrant nuclear energy program as the many countries that have fuel-cycle services provided by foreign nuclear suppliers clearly demonstrate. Finally, the notion that nuclear energy is somehow the key to lifting developing countries from third to first world status does not pass the laugh test. Given the large upfront investments, the cost of back-end fuel management and storage, and the ever-present danger of environmental catastrophe exemplified most recently by the Fukushima disaster in Japan, many argue that nuclear energy is not a cost-effective source of energy (if all the externalities are taken into account) for any country, not to mention those developing states least able to manage these myriad challenges. Taken together, therefore, the argument that nuclear nonproliferation policy is more dangerous than the consequences of nuclear proliferation, including possible nuclear war, is untenable. Indeed, it would certainly come as a surprise to the mild mannered diplomats and scientists who staff the International Atomic Energy Agency, the global focal point of the nuclear nonproliferation regime, located in Vienna, Austria. The anti-obsessionsists, like the optimists, also walk themselves into logical contradictions. In this case, their policy recommendations do not necessarily follow from their analyses. Ward argues that nuclear weapons are irrelevant and, therefore, we should eliminate them.[[53]](#footnote-53)[52] But, if nuclear weapons are really so irrelevant, why not just keep them lying around? They will not cause any problems if they are as meaningless as anti-obsessionists claim and it is certainly more cost effective to do nothing than to negotiate complicated international treaties and dismantle thousands of warheads, delivery vehicles, and their associated facilities. Finally, the idea that nuclear weapons are only important because we think they are powerful is arresting, but false. There are properties inherent in nuclear weapons that can be used to create military effects that simply cannot, at least not yet, be replicated with conventional munitions. If a military planner wants to quickly destroy a city on the other side of the planet, his only option today is a nuclear weapon mounted on an ICBM. Therefore, if the collective “we” suddenly decided to “defetishize” nuclear weapons by treating them as unimportant, it is implausible that some leader somewhere would not independently come to the idea that nuclear weapons could advance his or her country’s national security and thereby re-fetishize them. In short, the optimists and anti-obsessionists have brought an important perspective to the nonproliferation debate. Their arguments are provocative and they raise the bar for those who wish to argue that the spread of nuclear weapons is indeed a problem. Nevertheless, their counterintuitive arguments are not enough to wish away the enormous security challenges posed by the spread of the world’s most dangerous weapons. These myriad threats will be considered in the next section. Why Nuclear Proliferation Is a Problem The spread of nuclear weapons poses a number of severe threats to international peace and U.S. national security including: nuclear war, nuclear terrorism, emboldened nuclear powers, constrained freedom of action, weakened alliances, and further nuclear proliferation. This section explores each of these threats in turn. Nuclear War. The greatest threat posed by the spread of nuclear weapons is nuclear war. The more states in possession of nuclear weapons, the greater the probability that somewhere, someday, there is a catastrophic nuclear war. A nuclear exchange between the two superpowers during the Cold War could have arguably resulted in human extinction and a nuclear exchange between states with smaller nuclear arsenals, such as India and Pakistan, could still result in millions of deaths and casualties, billions of dollars of economic devastation, environmental degradation, and a parade of other horrors. To date, nuclear weapons have only been used in warfare once. In 1945, the United States used one nuclear weapon each on Hiroshima and Nagasaki, bringing World War II to a close. Many analysts point to sixty-five-plus-year tradition of nuclear non-use as evidence that nuclear weapons are unusable, but it would be naïve to think that nuclear weapons will never be used again. After all, analysts in the 1990s argued that worldwide economic downturns like the great depression were a thing of the past, only to be surprised by the dot-com bubble bursting in the later 1990s and the Great Recession of the late Naughts.[[54]](#footnote-54)[53] This author, for one, would be surprised if nuclear weapons are not used in my lifetime. Before reaching a state of MAD, new nuclear states go through a transition period in which they lack a secure-second strike capability. In this context, one or both states might believe that it has an incentive to use nuclear weapons first. For example, if Iran acquires nuclear weapons neither Iran, nor its nuclear-armed rival, Israel, will have a secure, second-strike capability. Even though it is believed to have a large arsenal, given its small size and lack of strategic depth, Israel might not be confident that it could absorb a nuclear strike and respond with a devastating counterstrike. Similarly, Iran might eventually be able to build a large and survivable nuclear arsenal, but, when it first crosses the nuclear threshold, Tehran will have a small and vulnerable nuclear force. In these pre-MAD situations, there are at least three ways that nuclear war could occur. First, the state with the nuclear advantage might believe it has a splendid first strike capability. In a crisis, Israel might, therefore, decide to launch a preemptive nuclear strike to disarm Iran’s nuclear capabilities and eliminate the threat of nuclear war against Israel. Indeed, this incentive might be further increased by Israel’s aggressive strategic culture that emphasizes preemptive action. Second, the state with a small and vulnerable nuclear arsenal, in this case Iran, might feel use ‘em or loose ‘em pressures. That is, if Tehran believes that Israel might launch a preemptive strike, Iran might decide to strike first rather than risk having its entire nuclear arsenal destroyed. Third, as Thomas Schelling has argued, nuclear war could result due to the reciprocal fear of surprise attack.[[55]](#footnote-55)[54] If there are advantages to striking first, one state might start a nuclear war in the belief that war is inevitable and that it would be better to go first than to go second. In a future Israeli-Iranian crisis, for example, Israel and Iran might both prefer to avoid a nuclear war, but decide to strike first rather than suffer a devastating first attack from an opponent. Even in a world of MAD, there is a risk of nuclear war. Rational deterrence theory assumes nuclear-armed states are governed by rational leaders that would not intentionally launch a suicidal nuclear war. This assumption appears to have applied to past and current nuclear powers, but there is no guarantee that it will continue to hold in the future. For example, Iran’s theocratic government, despite its inflammatory rhetoric, has followed a fairly pragmatic foreign policy since 1979, but it contains leaders who genuinely hold millenarian religious worldviews who could one day ascend to power and have their finger on the nuclear trigger. We cannot rule out the possibility that, as nuclear weapons continue to spread, one leader will choose to launch a nuclear war, knowing full well that it could result in self-destruction. One does not need to resort to irrationality, however, to imagine a nuclear war under MAD. Nuclear weapons may deter leaders from intentionally launching full-scale wars, but they do not mean the end of international politics. As was discussed above, nuclear-armed states still have conflicts of interest and leaders still seek to coerce nuclear-armed adversaries. This leads to the credibility problem that is at the heart of modern deterrence theory: how can you threaten to launch a suicidal nuclear war? Deterrence theorists have devised at least two answers to this question. First, as stated above, leaders can choose to launch a limited nuclear war.[[56]](#footnote-56)[55] This strategy might be especially attractive to states in a position of conventional military inferiority that might have an incentive to escalate a crisis quickly. During the Cold War, the United States was willing to use nuclear weapons first to stop a Soviet invasion of Western Europe given NATO’s conventional inferiority in continental Europe. As Russia’s conventional military power has deteriorated since the end of the Cold War, Moscow has come to rely more heavily on nuclear use in its strategic doctrine. Indeed, Russian strategy calls for the use of nuclear weapons early in a conflict (something that most Western strategists would consider to be escalatory) as a way to de-escalate a crisis. Similarly, Pakistan’s military plans for nuclear use in the event of an invasion from conventionally stronger India. And finally, Chinese generals openly talk about the possibility of nuclear use against a U.S. superpower in a possible East Asia contingency. Second, as was also discussed above leaders can make a “threat that leaves something to chance.”[[57]](#footnote-57)[56] They can initiate a nuclear crisis. By playing these risky games of nuclear brinkmanship, states can increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. Historical crises have not resulted in nuclear war, but many of them, including the 1962 Cuban Missile Crisis, have come close. And scholars have documented historical incidents when accidents could have led to war.[[58]](#footnote-58)[57] When we think about future nuclear crisis dyads, such as India and Pakistan and Iran and Israel, there are fewer sources of stability that existed during the Cold War, meaning that there is a very real risk that a future Middle East crisis could result in a devastating nuclear exchange.

## 2ac

### 2ac light water cp

#### And, the cp isn’t economically feasible - new fourth gen reactors are key

Silverstein, 12 [4/18/12, Ken, [Ken Silverstein](http://blogs.forbes.com/kensilverstein/), Contributor Energy Central Editor , “Nuclear Energy Accidents May Become Thing of Past”, <http://www.forbes.com/sites/kensilverstein/2012/04/18/nuclear-energy-accidents-may-become-thing-of-past/2/>]

Today, the U.S. might have chosen a different path. But it would be too costly to retrofit the **existing** nuclear energy infrastructure to comport with the thorium fuel cycle. The supply chain is now fully stocked and includes everything from uranium suppliers to reactor designers. “It is possible to convert the existing reactors to thorium reactors **over time**,” says Thomas Drolet, a nuclear energy expert with his own consulting firm in Englewood, Fla., in a phone interview. “But it would be high capital costs. **What you really want to do is to start from scratch**.” The [104 nuclear power plants operating](http://www.energybiz.com/article/12/03/ceos-odds-over-nuclear-energy-future) in the United States today use so-called second generation light water, solid fuel reactors. They operate, on average, at more than 90 percent capacity and have been working safely for at least 36 years. “Third generation” light water reactors are going up predominately in India and China and they are the ones that are to be constructed by [Southern Company](http://www.forbes.com/sites/kensilverstein/2012/02/19/how-many-lives-does-nuclear-energy-have/) and[Scana](http://www.forbes.com/companies/scana/), both of which were recently approved to build by the U.S. Nuclear Regulatory Commission. Those third generation reactors have superior fuel technology, thermal efficiency and safety features. The next-generation reactors, called “fourth generation,” are those that run at **much higher temperatures**. They are even more efficient than those in the third generation, giving them the potential to produce more electricity at less cost. The high temperatures also enable hydrogen production as well as a variety of industrial applications. Thorium is most suited **to run in fourth generation** “liquid fuel” reactors, which operate at lower pressures and which are therefore safer. Such molten salt reactors must reach high level temperatures to melt a salt solid. That liquid and fuel mixture is then used as a coolant in the fuel cycle. Critics say that it is still difficult to maintain high thermal efficiencies, which diminishes the economic case for those liquid fuel reactor’s over today’s technologies. “All fourth generation reactors make much less waste and run at higher temperatures,” says John Kutsch, executive director of the [Thorium Energy Alliance](http://www.thoriumenergyalliance.com/) in [Chicago](http://www.forbes.com/places/il/chicago/), who spoke with this writer by phone. “But the similarity ends there. Inherently, thorium is much more abundant and easier to handle.”

### 2ac privatization counterplan (1)

#### Competitiveness isn’t zero sum – US gains don’t hurt others

Bordoff et al, 9 - Policy Director of the Hamilton Project, an economic policy initiative at Brookings (Jason, "Strengthening American Competitiveness: Regaining Our Competitive Edge", Feburary, Brookings, <http://www.brookings.edu/~/media/research/files/reports/2009/2/american%20competitiveness%20brainard/02_american_competitiveness_brainard.pdf>) // NK

Increased competitiveness need not come at the expense of others at home or overseas. An expanding global economy means that more nations and people can achieve higher standards of living. Indeed, the global economy has contributed to lifting hundreds of millions out of poverty around the world. The threat to U.S. competitiveness is not that emerging economies are becoming too strong, but that polarization and paralysis in Washington have allowed the U.S. economy to become too weak. While other nations have been investing heavily in their people, ideas and infrastructure (and some in their own green transformations), the United States has been spending down the public goods that are crucial for our children’s prosperity. It is past time to invest in America’s society and economy.

#### The government can successfully pick winners better than the private sector

**Borrus and Stowsky, 97** – Berkeley (Michael and Jay, “Technology Policy and Economic Growth”, The Berkeley Roundtable on the International Economy, CIAO)

In fact, even accepting the critic's definition of the issue, there are limiting cases in which the reductionist conclusion about picking winners and losers is not defensible. The most important is the development of new technologies, for which markets are not entirely adequate institutions. As previously noted, empirical evidence suggests that as a result of spillovers of all kinds, the social returns to R&D spending on new technologies far exceed the private returns, perhaps by as much as 50 to 100%. 12 Appropriability problems lead to over-investment in some technologies and under-investment in others relative to the social optimum. 13

Markets also deal inadequately with technological progress because of the highly contingent nature of innovation. Rather than being preordained by scientific logic, technology development is contingent upon the actions of developers, producers and users, as they perform their respective roles, interact, and accrue different kinds of know-how over time. The contingent nature of technical progress means that perfect information is impossible; neither innovators nor the private capital markets that fund them are fully capable of accurately evaluating the risks involved. Therefore, private capital markets and innovators alike must misallocate their investment and effort. Some bets will pay off big; some not at all. Winners and losers can only be positively identified in the revealing gaze of hindsight.

This is as true for private as public investment. For every Apple Macintosh there are normally several Altairs and Amigas. For every IBM there are several GEs and RCAs whose technological bets on mainframe computers failed to pay off. For every Intel there are defunct Molectros and AMEs. For every winner in a venture portfolio, there are untold losers that get nowhere near the publicity. Indeed, there is absolutely no evidence, beyond the economist's leap of faith, that private investment is any more capable than public investment of separating the winners from the losers before the fact. The major difference is that private losers exit the market, while publicly backed losers are held to the higher standard of wasting taxpayers' money.

In short, picking winners and losers is the wrong metaphor to characterize the government's socially useful and necessary activity of supporting the process of innovation. Government is actually placing bets on our collective future. From the public standpoint, the magnitude of the potential social gains is sufficiently large to provide a comfortable margin for error in choosing among technologies to back. 14

#### Cap and trade is a form of central planning of energy markets that kills innovation

**Smith, 07 –** president of the Competitive Enterprise Institute (Fred, COMMITTEE Hearing on the U.S. Climate Action Partnership Report, 2/13, <http://epw.senate.gov/public/index.cfm?FuseAction=Hearings.Testimony&Hearing_ID=9d420df7-802a-23ad-4615-a240504c6347&Witness_ID=0c43573e-35d0-4cd3-b15f-9dcee707e5e6>)

Let us begin by examining the policy at the heart of the Partnership’s plan, the regulatory capping and trading of greenhouse gas emissions. Cap and trade, as it is known, is often described as market-based, because there is buying and selling involved. This is a misnomer. In fact, cap and trade is an ugly combination of two of the greatest ills to affect the market economy over the past two hundred years – cartelization and central planning.

The central planning issue should be obvious. The cap of cap and trade is a target for emissions set by government agencies. The knowledge problem, however, rears its ugly head. Those agencies never have enough information to set the cap at the right level. All economic decisions involve trade-offs and the trade-offs involved in restricting greenhouse gas emissions are mighty indeed.

We have seen an excellent example in the past few weeks. The mandate that every gallon of gasoline sold in this country should have a certain amount of ethanol added to it has caused a massive increase in the amount of the U.S. corn crop used to make ethanol. In turn, this has caused a sharp rise in the price of tortillas in Mexico, leading to all sorts of social problems there. Did the legislators consider this unintended negative consequence when they passed the law? I don’t think so. Did the agencies that administer the program consider it? I very much doubt it. A greenhouse gas cap would have even more negative consequences. To suggest that we can account for all of these is to fall into what the Nobel prize-winning economist Friedrich Hayek termed the fatal conceit. There will be costs to an emissions cap that no one has yet thought of.

Turning to the expected economics, the figure below represents a loss to the economy under a carbon cap that we can predict. It is a deadweight loss, reflecting an unrecoverable reduction in real incomes caused by the cessation of economic activity. That is a cost to the economy that we can measure.

Yet it is the remaining economic activity that reveals the dark secret of cap and trade; it creates a modern-day cartel – a carbon cartel, or what the Wall Street Journal aptly called BigCarbonCap– with all the negative consequences that go with cartelization. When emitters are given permits reflecting their right to emit a certain amount of greenhouse gases, those permits represent a scarcity rent: a new, artificial scarcity has been created in something people previously did without charge. People will pay for this new right, but the money that is used to pay for it is not new money. It represents the capitalized value to existing users of the benefits they get from fossil fuels and the other sources of greenhouse gases. It is already accounted for in balance sheets, investment portfolios, collateral for loans and so on. That value is now extracted from its current use and sent elsewhere instead – into the hands of the carbon cartel.

This is what advocates of this policy refer to as the wealth that such rationing would create. However, transferring wealth from some companies and all consumers to special interests does not create new wealth.

As a result of this cartelization, energy costs rise, consumer prices rise, real wages fall, and output and employment fall. We know those are the effects of cartels, which is why we used to put the people who set up cartels in jail. Yet the Climate Action Partnership wants legal blessing for this new cartel. Any legislation enacting cap and trade would actually ennoble a new generation of robber barons and provide legal protection for their profiteering activities.

#### Counterplan doesn’t solve the case – it might cause economic changes, but that doesn’t guarantee Thorium tech – 1ac Donohue and Wash Post say that tech in particular is key to access the case – it can’t solve other externalities

#### Doesn’t solve –

#### ---- Risk aversion

Niiler, ‘11

[Eric, Washington Post, 12-15, “Nuclear power entrepreneurs push thorium as a fuel,” http://www.washingtonpost.com/national/health-science/nuclear-power-entrepreneurs-push-thorium-as-a-fuel/2011/12/15/gIQALTinPR\_story.html]

Sorensen says a LFTR using a mixture of thorium as a fuel plus either uranium or plutonium to kick-start the reaction could produce higher core temperatures at lower pressures than steam reactors, meaning it would not need as many safety and cooling systems. Even better, he says, LFTRs could be configured to consume the spent fuel that is sitting around the country at nuclear sites. page 3 Other entrepreneurs are taking a different tack. McLean-based Lightbridge wants to mix thorium and uranium to slightly boost the output of existing nuclear plants. Lightbridge is helping the Russian government build such a program, said Seth Grae, the company’s president and chief executive. But most U.S. nuclear energy industry executives are wary of both approaches to thorium, saying that neither utilities nor investors are eager to gamble on an unfamiliar technology. “Customers are telling us, ‘Let’s focus on taking [financial] risk off the table, not putting it back on,’ ” said Chris Mowry, president and chief executive of Babcock & Wilcox, a Lynchburg-based firm that is building smaller reactors fueled by uranium. “We view [thorium] as something that’s down the road. It’s more of the science-project phase.”

#### ---- Uranium intertia

Niiler, ‘11

[Eric, Washington Post, 12-15, “Nuclear power entrepreneurs push thorium as a fuel,” http://www.washingtonpost.com/national/health-science/nuclear-power-entrepreneurs-push-thorium-as-a-fuel/2011/12/15/gIQALTinPR\_story.html]

Dr. Dan Ingersoll's biggest argument is that we shouldn't use it because it hasn't been proven to work yet? Are you kidding me? Oh ok, we shouldn't invest in any research at all then because none has been proven yet. Is he forgetting the MSR project at Oak ridge in the 60's? The real reason the nuclear industry doesn't want throium on the table is because A. they won't be able to make a financial killing on it like they do with uranium. What would happen to GE if suddenly the energy from $60,000,000,000 worth of uranium will become available from $10,000 of thorium. There are too many people who have invested in uranium. B. thorium is inefficient as a source of plutonium for bombs.

#### --- can’t leverage the private sector

Katusa, ‘12

[Marin, Chief Energy Investment Strategist, Casey Research, Market Oracle, 2-14, “Why Not Thorium Fueled Nuclear Reactors Instead of Uranium?” http://www.marketoracle.co.uk/Article33137.html]

So, should we run out and invest in thorium? Unfortunately, no. For one, there are very few investment vehicles. Most thorium research and development is conducted by national research groups. There is one publicly traded company working to develop thorium-based fuels, called Lightbridge Corp. (Nasdaq: LTBR). Lightbridge has the advantage of being a first mover in the area, but on the flip side the scarcity of competitors is a good sign that it's simply too early.

#### Permutation

#### Corporate tax too low – cuts kill competitiveness and crush innovation, this turns the entire CP

**Brodwin, 4/4** cofounder and board member of American Sustainable Business Council (David Brodwin, US News, 4 April 2012, “The Truth About Corporate Tax Rates,” http://www.usnews.com/opinion/blogs/economic-intelligence/2012/04/04/the-truth-about-corporate-tax-rates)//CC

A furious debate rages between those wanting to cut taxes on U.S. corporations and those hoping to raise them. The two sides come armed with opposing and contradictory "facts." Some claim U.S. corporate taxes rank highest in the developed world. Others argue the opposite. When we cut through the rhetoric, a clear but complex answer emerges: Corporate taxes should be increased for most companies—and decreased for a few. The tax structure needs to be repaired to eliminate bad incentives that threaten our economy. Those urging lower taxes are right to argue that our economy stagnates if taxes are too high. High taxes discourage investment and risk-taking. But how high is too high? Many economists agree that when tax rates soar above 70 percent, growth suffers. Cutting taxes at this level definitely stimulates growth. However, these same economists also agree that when tax rates dip below 30 percent, further cuts don't boost the economy. Entrepreneurs and investors simply don't respond to an additional incentive. They are already as strongly incented as they can possibly be. [See a collection of political cartoons on the economy.] American history supports these economists' conclusions. The economy took off dramatically in the 1960s when top marginal rates were slashed from the 90 percent level. But when taxes were cut sharply from relatively modest levels early in President George W. Bush's term, no growth resulted. The real issue lies in understanding the huge gap between the "nominal rate" (the list price) and the "real rate" (the tax rate that most companies actually pay.) These two rates diverge widely. The nominal federal tax rate on the largest corporations is now 35 percent. State taxes, on average, bump this to 39.2 percent. This nominal rate ranks as the highest among developed countries. [Read the U.S. News debate: Is Obama's Corporate Tax Plan A Good Idea?] However, no major company really pays the nominal rate—just as no one walks into a car dealership expecting to pay sticker price. Big companies enjoy a huge buffet of credits, shelters, deductions, and other preferences that reduce their rate to an average of 13 percent. Many profitable companies pay no federal income tax at all. Regardless of our nominal rate, our real corporate tax rate is among the lowest. Further cuts cannot stimulate growth. Moreover, cutting corporate tax rates would create two new problems. First, further reductions in federal budgets would directly undermine America's competitiveness. (After 20-plus years of tax cuts, there's little "fat" left to excise.) For example, federal belt-tightening has led states to slash support for higher education. College tuition has skyrocketed, far outpacing family income. Today's college students struggle to get the education they need to hold well-paying technical jobs, and many must take on massive debt to pay their tuition. [See a collection of political cartoons on the budget and deficit.] The second problem: The corporate income tax does not affect all businesses equally. Large corporations pay much lower tax rates than small businesses, because they can exploit loopholes and establish offshore operations. However, small businesses provide more new private sector jobs, and function as the main employers in many parts of the country. Further, the tax code shields old industries at the expense of new more innovative sectors, and it protects industries that burden the rest of society. Why should we subsidize oil rather than renewable energy? Why should we subsidize corn syrup that promotes obesity and drives up healthcare costs? The problem with the corporate tax code is not what many think. Frankly, we can change the nominal tax rate to practically anything. It doesn't matter since hardly any corporations pay the nominal rate. What matters is this: Bring up the real tax rate (what companies actually pay) to support needed investments in productivity and competitiveness. Stop penalizing small business. And, end the gimmicks and loopholes that encourage investment in damaging business practices and obsolete industries.

### 2ac Namibia da

#### Uranium prices are low now – post Fukushima recovery

**Bloomberg 12** [“Uranium Recovery Postponed as Price Drops to 2-Year Low”, Christopher Donville, Sep 19, 2012]

Uranium’s recovery from the Fukushima nuclear accident may take one or two years longer than analysts estimated as stockpiles in Japan and Germany keep prices low and cause mining companies to defer new development.¶ The price of uranium for immediate delivery declined to $47 a pound as of Sept. 17, its lowest in two years, according to Ux Consulting, a Roswell, Georgia-based uranium information provider. BHP Billiton Ltd. (BHP) and Paladin Energy Ltd. (PDN) have slowed or deferred development this year of some projects to produce the raw material in nuclear reactor fuel.¶ Japan temporarily shut all of its nuclear reactors after the disaster at Tokyo Electric Power Co.’s Fukushima Dai-Ichi plant. That nation’s return to nuclear power and demand for electricity in China, which is building 25 reactors, was supposed to help drive prices for the fuel back up in 2015, said Thomas Neff, a retired physicist at the Massachusetts Institute of Technology. That date that may be pushed back a year or two.¶ “There was a wave of optimism the Japanese would come back on fast and that China would resume rapid development,” Neff, who now works as an energy industry researcher for the university’s Center for International Studies, said yesterday by phone from Jackson, Wyoming. “Day-to-day spot prices are reflecting the belief that the short-term outlook -- at least two to three years out -- is less certain than it was.”¶ Japan will end the use of atomic power by the 2030s, the government said Sept. 14, and Germany’s government has also decided to phase out nuclear energy. China continues to review approvals for new reactors amid concerns about safety, Heenal Patel, a London-based energy analyst with Bloomberg Industries, said yesterday.¶ Net Demand¶ “Japanese and German inventories and displaced supply would result in no net new demand until after 2015,” Neff said, citing a January study his group did. The new target for a return to uranium demand is 2016 or 2017, he said.

#### Massive declines over the past 5 years should have triggered the link

KIDD 9/18/12 (Steve; Deputy Director-General – World Nuclear Association, “Uranium Supply – how has Fukushima changed the market?” Nuclear Engineering International, l/n)

Interest in the world uranium market has undoubtedly subsided since the period in 2007 when prices spiralled rapidly upwards to over US$100 per pound. The price level soon fell back and spot prices have fluctuated around the $50 per pound level during 2012 to date. When the price rose above $50, demand rapidly disappeared; prices in the $40s attracted more buyers. Hence something like market equilibrium appears to have been achieved. The crazy period in 2007 had at least one good feature as the level of knowledge about uranium in the financial sector has undoubtedly increased. The fundamentals of the market are now much better understood, although another turbulent period cannot be ruled out. Although the market may still be somewhat imperfect, it is much less so than in the past.

#### No demand increases until at least 2016 or 2017

**Pistilli 12** [“Uranium Market Headed Toward Supply Deficit”, September 20, 2012, Melissa Pistilli, Exclusive to Uranium Investing News]

Market watchers are forecasting a uranium supply deficit that should push spot prices higher in the coming years. But for now, “off-putting” best describes prices, as many uranium resource companies are delaying new development until economies improve.¶ Uranium spot prices continued to fall this week as analysts called for no new net demand until 2016 or 2017, a slower market recovery than expected. TradeTech is reporting a U308 spot price of $48 per pound while Ux Consulting puts the price at $47/lb.¶ Reports blame Japanese and German stockpiles as both nations have announced plans to phase out their civilian nuclear porograms.

#### Namibia says some drugs – not all drugs

#### Africa instability inevitable

**Brower and Chalk** 2o0**3** – RAND Co-Project Director & RAND Political Scientist specializing in emerging threats [Jennifer Brower & Peter Chalk, The Global Threat of New and Reemerging Infectious Diseases: Reconciling U.S. National Security and Public Health Policy, www.rand.org/pubs/monograph\_reports/MR1602/]

Fifth, the spread of infectious diseases can act as a catalyst for regional instability. Epidemics can severely undermine defense-force capabilities (just as they distort civilian worker productivity). By galvanizing mass cross-border population flows and fostering economic problems, they can also help create the type of widespread volatility that can quickly translate into heightened tension both within and between states. This combination of military, demographic, and fiscal effects has already been created by the AIDS crisis in Africa. Indeed, the U.S. State Department increasingly speculates that the disease will emerge as one of the most significant “conflict starters” and possibly even “war outcome determinants” during the next decade.29

#### The plan is key to self-sufficient forward operating bases

Ackerman, 11 [Spencer, February 18th, Latest Pentagon Brainstorm: Nuke-Powered War Bases, Wired. Com. http://www.wired.com/dangerroom/2011/02/nuke-bases/]

Buried within Darpa’s 2012 budget request under the innocuous name of “Small Rugged Reactor Technologies” is a $10 million proposal to fuel wartime Forward Operating Bases with nuclear power. It springs from an admirable impulse: to reduce the need for troops or contractors to truck down roads littered with bombs to get power onto the base. It’s time, Darpa figures, for a “self-sufficient” FOB.¶ Only one problem. “The only known technology that has potential to address the power needs of the envisioned self-sufficient FOB,” the pitch reads, “is a nuclear-fuel reactor.” Now, bases could mitigate their energy consumption, like the [solar-powered Marine company](http://www.wired.com/dangerroom/2011/01/afghanistans-green-marines-cut-fuel-use-by-90-percent/) in Helmand Province, but that’s not enough of a game-changer for Darpa. Being self-sufficient is the goal; and that requires going nuclear; and that requires … other things.¶ To fit on a FOB, which can be anywhere from Bagram Air Field’s [eight square miles](http://www.wired.com/dangerroom/2010/08/u-s-afghan-mega-base/) to dusty collections of wooden shacks and concertina wire, the reactor would have to be “well below the scale of the smallest reactors that are being developed for domestic energy production,” Darpa acknowledges.¶ That’s not impossible, says Christine Parthemore, an energy expert at the Center for a New American Security. The Japanese and the South Africans have been working on miniature nuclear power plants for the better part of a decade; Bill Gates has [partnered with Toshiba](http://news.bbc.co.uk/2/hi/8582692.stm) to build mini-nuke sites. (Although it’s not the most auspicious sign that one prominent startup for modular reactors [suspended its operations](http://www.greentechmedia.com/articles/read/nuclear-startup-nuscale-suspends-operation/) after growing cash-light last month.) Those small sites typically use uranium enriched to about 2 percent. “It would be really, really difficult to divert the fuel” for a bomb “unless you really knew what you were doing,” Parthemore says.¶ But Darpa doesn’t want to take that chance. Only “non-proliferable fuels (i.e., fuels other than enriched uranium or plutonium) and reactor designs that are fundamentally safe will be required of reactors that may be deployed to regions where hos tile acts may compromise operations.”¶ Sensible, sure. But it limits your options: outside of uranium or plutonium, [thorium](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is the only remaining source for generating nuclear fuel. The Indians and now the Chinese have experimented with thorium for their nuclear programs, but, alas, “no one has ever successfully found a way” to build a functioning thorium reactor, Parthemore says, “in a safe and economical manner.”

Solves effective peacekeeping

Mosher et al., 8 (David E., Senior Policy Analyst @ RAND, Green Warriors: Army Environmental Considerations for Contingency Operations from Planning Through Post-Conflict, RAND)

The environment may also be important during the post-conflict phase of an operation,9 or even before combat operations end. Providing clean water, managing sewage, or providing irrigation water can be important for convincing the local populace to support the U.S. mission and not an insurgency, according to some commanders.10 Although these are not traditional Army missions, they can have an important effect on the outcome of an operation, from both a military and a political perspective. Addressing legacy problems can also help a new government develop legitimacy and can enable U.S. forces to withdraw from the country sooner**.** Indeed, many of the goals of stability operations defined in the 2006 edition of JP 3.0, Joint Operations, can have environmental components. Operational effectiveness can be hampered by poor environmental practices or helped by good ones. Logistics requirements and costs can be reduced by good practices, for instance, applying technologies to reduce operational requirements for petroleum, oil**,** and lubricants (POL) or field water treatment systems, or reducing acute threats to soldier health. Good environmental practices can also reduce the resources that must be diverted to address environmental issues. Commanders may also want to reduce or prevent liabilities, either financial or diplomatic. Good environmental awareness and practices during contingency operations can reduce the financial liabilities the Army and the United States may face. On more than one occasion in recent operations, contractors have removed hazardous wastes from base camps and, without Army knowledge, dumped them along the side of a road or in other inappropriate locations, sometimes to avoid disposing of them properly or to sell the drums that hold the wastes. These actions have created cleanup costs for the Army that are many times higher than the original price of the contract. In other cases, the Army has had to spend large sums to remediate serious preexisting environmental contamination at base camps, expenses that could have been avoided if the base camps had been located elsewhere. Financial liabilities can also arise from claims brought by U.S. soldiers who believe they were exposed to hazardous substances, as the Army’s past experiences with Agent Orange and Gulf War Illness illustrate. 11 Members of the local populace may also bring claims against the Army for environmentally related damage, draining funds that could be more effectively used for reconstruction or stabilization activities. Inadequate attention to environmental issues can also create diplomatic liabilities. Illegal dumping by contractors and poor waste management practices by soldiers have caused immediate diplomatic problems with host nations whose support has been critical. Long-term diplomatic problems from environmental problems can also emerge years after an operation is over. Perhaps most important are the environmental issues that can affect U.S. national objectives, those strategic political and economic objectives that U.S. leaders established when they committed forces to the contingency operation in the first place. One such national objective may be winning and maintaining support of the local populace. Although environmental conditions may be poor and national environmental laws may be weak or nonexistent, our research indicates that locals often care deeply about the environment, which can be critical to their survival, livelihood, and well-being. Vital environmental issues can include access to clean drinking water, effective sewage systems, and viable farmland (see Box 1.1). Restoring or building these basic infrastructures is often essential for the economic and social development necessary for stability. To the extent that such projects improve cooperation with locals, they can lower security risks, improve intel- ligence, and speed reconstruction. National objectives that have environmental components also include preserving natural resources that have important economic value (such as oil fields or fisheries) and even preserving cultural resources that are a matter of national, regional, religious, or cultural pride. If long-term stability of a country is a mission objective, sustainability and the long-term health of nbatural systems, including watersheds, forests, ecosystems, biodiversity, and farmlands, are also important. Local customs and practices can take the place of laws, and therefore military leaders, when designing plans and conducting operations, should understand how the local people interact with their environment. The environmental components of national objectives are often seen as falling outside the normal conception of the military mission. Because they have little to do with combat operations or military objectives, they are often not taken into consideration during the Army’s planning, training, or operations. Yet ignoring these broader political objectives can lead to failure, as Prussian military writer Carl von Clausewitz warned.12 Thus, the environmental dimensions of national objectives should be carefully considered. The manner in which the military conducts its operations can affect environmental outcomes upon which the success of the overall mission may depend. There is some evidence that national objectives such as stabilizing societies after conflict are now being emphasized at the Army’s combat training centers, but the degree to which environmental considerations are included is unclear.

**Global nuclear war**

Dean 95 [Jonathan, former ambassador to NATO, The Bulletin of Atomic Scientists, p. google]

IN ANY EVENT, in a world of interconnecting COMMUNICATIONS AND ENVIRONMENTAL, TRADE, AND FINANCIAL LINKS, the United States, a leading industrial trading country that needs access to raw materials and markets, usually ends up paying in one way or another when a major regional conflict erupts. IN PRACTICAL TERMS, it is impossible for the United States to avoid some degree of involvement when major regional conflicts break out. FOR 200 YEARS, THE UNITED STATES HAS BEEN URGING LIBERTY, FREEDOM, DEMOCRACY, HUMAN RIGHTS, FREE MARKET VALUES, VOLUNTARY MUTUAL AID AND COLLECTIVE SECURITY ON THE OUTSIDE WORLD. THE UNITED STATES IS THE SOLE SURVIVING WORLD-CLASS POWER, WITH MILITARY STRENGTH AND GNP FAR LARGER THAN ANY OTHER COUNTRY. AS A RESULT, when large-scale conflict erupts, the United States cannot avoid being called on for help, as it was in Somalia, Bosnia, Rwanda, and Haiti. For the United States to seek to stand aside or to respond only weakly in such cases is to risk damage to its credibility AND WORLDWIDE INFLUENCE. PRESIDENT CLINTON JUSTIFIED THE NATO BOMBING OF SERBIAN POSITIONS IN BOSNIA AND THE U.S. INVASION OF HAITI BY SAYING THAT THE CREDIBILITY AND RELIABILITY OF THE U.S. WAS AT STAKE, AS IT WAS. IT IS TRUE THAT PAST ADMINISTRATIONS USED SIMILAR ARGUMENTS TO JUSTIFY CONTINUED U.S. INVOLVEMENT IN VIETNAM LONG AFTER IT WOULD HAVE BEEN WISE TO WITHDRAW. NONETHELESS, WHEN THE COLLECTIVE DISAPPOINTMENT OF WORLD OPINION OVER THE BEHAVIOR OF THE UNITED STATES (OR OF ANY MAJOR COUNTRY) BECOMES INTENSE AND ENDURING, IT BEGINS TO UNDERMINE THE INTERNATIONAL PRESTIGE AND STANDING OF THE ENTIRE NATION CONSIDERABLE DIMINUTION OF U.S. STATURE AND INFLUENCE HAS ALREADY TAKEN PLACE OVER THE PAST FOUR OR FIVE YEARS IN CONNECTION WITH FALTERING U.S. POLICIES TOWARD BOSNIA, SOMALIA, AND RWANDA. FORTUNATELY, AMERICANS ARE NOT SPARTANS, ROMANS OR PRUSSIANS-SELF-DISCIPLINED MILITARISTIC PEOPLES WHO CONSIDERED IT A MATTER OF NATIONAL PRIDE NOT TO RECOIL FROM CONFLICT BECAUSE OF CASUALTIES AMONG THEIR FORCES. HOWEVER, IF THE TRENDS CONTINUE THAT UNDERLIE THE PUBLIC OUTRAGE THAT FOLLOWED THE DEATH OF U.S. SERVICEMEN IN SOMALIA, AND U.S. ADMINISTRATIONS CONTINUE TO ABSTAIN FROM PEACEKEEPING ACTIVITIES BECAUSE THEY COULD ENTAIL CASUALTIES, THE UNITED STATES WILL NOT LONG REMAIN A WORLD POWER. If U.S. national prestige declines further under conditions like these, the U.S. capacity to constructively influence the course of events without the use of force will decrease. And when force must be used, the United States may have to use more of it to be effective. EXPERTS THROUGHOUT THE WORLD EXPECT GROWING POPULATION PRESSURES AND INCREASING ENVIRONMENTAL STRESS TO DEVELOP OVER THE COMING DECADES INTO INTENSE, FAR-REACHING SOCIAL UNREST AND REGIONAL CONFLICT. ECONOMIC DEVELOPMENT IS THE SOLUTION, HOWEVER SLOW AND UNCERTAIN IT MAY BE IN COMING. BUT the world also needs effective regional conflict-prevention procedures. Left on its own, regional violence can lead to confrontation and even war between the great powers, including the United States, AS MIGHT OCCUR, FOR EXAMPLE, in the event of conflict between Ukraine and Russia or between China and its neighbors. IN THE FINAL ANALYSIS, unchecked regional violence and the fear of further violence will lead more states to develop nuclear weapons. IN PAST DECADES, this process occurred in Israel, South Africa, India, Pakistan, IRAQ, and PRESUMABLY, IN North Korea. A world with 20 or 30 nuclear weapon states would not only make a more effective global security system impossible, it would lead the present nuclear weapon states to modernize and increase their weapons-and it would markedly increase the vulnerability of the United States to direct attack. Instead of SHRUGGING AT HUMAN FALLIBILITY, accepting war as inevitable, AND REACTING AFTER IT HAPPENS, U.S. policy should aim at establishing an international peacekeeping system that can head off an increasing number of conflicts. CONSEQUENCES IF THIS REASONING IS ACCEPTED, THE ADMINISTRATION SHOULD DECIDE ON AND PUBLICLY DECLARE AN EXPLICIT LONG-TERM POLICY OF JOINING WITH OTHER COUNTRIES IN SEEKING A GRADUAL LOWERING OF THE LEVEL OF ARMED CONFLICT IN THE WORLD THROUGH PREVENTING A GROWING PROPORTION OF POTENTIAL WARS AND CURTAILING WARS WHEN THEY DO OCCUR. This goal would be achieved by building an increasingly effective worldwide network of regional conflict-prevention and peacekeeping organizations headed by a more effective United Nations.

### 2ac politics

#### No impact – ‘fiscal cliff’ overblown

Christine Benz (writer for the Morningstar) September 23, 2012 ‘Who's Getting Conservative in Advance of the Fiscal Cliff?

'The Fiscal Cliff Is More Like a Fiscal Stairway' Even as some posters were actively making changes with the expectation of a rough patch, many others are standing pat. The, worries over the fiscal cliff are overblown in KitCat's view. "I have hopes (or some may call it hopeless optimism) that something will be done about the fiscal cliff. Maybe not everything as I'd prefer it, but I feel 75% will be. Therefore [I have] no plans for any changes at this point." Sezen13 also argues that worries over the fiscal cliff are overblown. "The fiscal cliff is more like a fiscal stairway, a gradual descent, federal taxes raised a small amount, spending cuts spread over a period of time. Any adverse impact will likely be short, soon swamped by worldwide economic events."

#### Wont pass now

Scott Shane (writer for Terra) September 30, 2012 “Should Small Business Fear the Fiscal Cliff? (Opinion)” http://news.terra.com/should-small-business-fear-the-fiscal-cliff-opinion,ee822291a771a310VgnVCM10000098cceb0aRCRD.html

It’s difficult to envision a political solution that keeps the U.S. from going over the fiscal cliff. Right now Congress is in full election mode and won’t do anything but posture before Nov. 6. Even after the election, a lame-duck Congress is unlikely to act. Moreover, no matter how the election turns out, action in January seems unlikely. The Democrats are unlikely to reverse the tax increases that contribute to the fiscal cliff if they control the presidency and both houses of Congress come January. A government divided between the two major parties would be unlikely to agree on taxes and government spending. And while the Republicans might reverse the tax increases that contribute to the fiscal cliff if they control both houses of Congress and the presidency in 2013, the Tea Party wing of the GOP isn’t likely to agree to reversing scheduled spending cuts. If the Las Vegas bookmakers will take the bet, putting money on the economy going over the fiscal cliff and returning to recession in 2013 is (sadly) a good wager.

#### The plan has political legs – reserves, track record, and environmental benefits

Frye, 08 [Copyright (c) 2008 Energy Bar Association Energy Law Journal 2008 Energy Law Journal 29 Energy L. J. 279 LENGTH: 54433 words ARTICLE: THE CURRENT "NUCLEAR RENAISSANCE" IN THE UNITED STATES, ITS UNDERLYING REASONS, AND ITS POTENTIAL PITFALLS NAME: Roland M. Frye, Jr.\* BIO: \* Mr. Frye has practiced in the field of federal energy regulation for thirty-one years, in both the public and private sectors, and has served for the last sixteen years as the Senior Attorney in the Office of Commission Appellate Adjudication of the United States Nuclear Regulatory Commission (NRC), p. lexis]

The bulk of thorium reserves are within countries friendly to the United States. [n347](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n347) This may be one reason why, within the U.S., thorium has "political legs." Senator Orrin Hatch (R-Utah) is seeking to require DOE to develop standards for the use of thorium rather than uranium as fuel for nuclear power plants. His legislation "would force... [the DOE]... and the [NRC]... to create new offices at [those two] agencies to study thorium-fuel options and promote their use abroad." [n348](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n348) In fact, Sen. Hatch has joined with Sen. Harry Reid (D-Nev.) to sponsor the Thorium Energy Independence and Security Act of 2008, providing $ 250 million to this end. [n349](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n349) This is particularly important because DOE is currently wedded to the controversial alternative concept of the closed uranium fuel cycle, which involves reprocessing spent fuel, using a uranium-plutonium fuel blend, and burning the fuel in breeder reactors.

Another likely reason for thorium's political legs is its existing track record within the United States: the first Indian Point reactor outside New York City  [\*330]  used a thorium-uranium blend of fuel in the 1960s and 1970s, as did the Oak Ridge Tennessee reactor mentioned above. A third reason for thorium's political legs is that at least some in the **environmental** community view it as preferable to any other nuclear energy option. For instance, the Natural Resources Defense Council, through its Nuclear Program Director Thomas B. Cochran, considers both Senator Hatch's bill and thorium power to "make[] a lot of sense." [n350](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n350)

#### Recent report is causing Libya backlash

RAP (Red Alert Politics, editorial staff) September 16, 2012 “Obama’s Skipped Intel Meetings Under Scrutiny” http://redalertpolitics.com/2012/09/16/obamas-skipped-intel-meetings-under-scrutiny/

A simple three-page report by the Government Accountability Institute tallying up the number of days President Barack Obama has attended his Presidential Daily Brief (PDB) on intelligence has ignited a firestorm of controversy that places the attacks on the U.S. embassy in Cairo and the murder of U.S. Libyan Ambassador Chris Stevens and three members of his staff in a new and critical light. The report found that of the first 1,225 days of his time in office, Mr. Obama has attended less than half (43.8 percent) of his daily intelligence briefings. As Breitbart News reported last week, in the week prior to the slaying of U.S. Ambassador Stevens, the White House official calendar shows no record of Mr. Obama attending his PDB. When the GAI report was initially reported in a Washington Post article by Marc Thiessen, White House Press Secretary Jay Carney dismissed the report’s findings as “hilarious.” The very next day, Ambassador Stevens and three American members of his staff were murdered. Now, with the Middle East ablaze, White House reporters on Friday once again pressed Mr. Carney on why Mr. Obama has attended less than half of his daily intelligence briefings, even as he makes time for parties with Beyonce and Jay-Z, as well as numerous fundraisers. According to ABC News, Mr. Carney did not dispute the GAI report’s numbers or findings, but said it depends on what the definition of “attended” is:

#### PC not key

**Klein, 3/19/12** [The Unpersuaded Who listens to a President? by [Ezra Klein](http://www.newyorker.com/magazine/bios/ezra_klein/search?contributorName=ezra%20klein) March 19, 2012, Ezra Klein is the editor of Wonkblog and a columnist at the Washington Post, as well as a contributor to MSNBC and Bloomberghttp://www.newyorker.com/reporting/2012/03/19/120319fa\_fact\_klein#ixzz1p36PrMbH]

This, Edwards says, is the reality facing modern Presidents, and one they would do well to accommodate. “In a rational world, strategies for governing should match the opportunities to be exploited,” he writes. “Barack Obama is only **the latest** in a **long line** of presidents who have not been able to transform the political landscape **through** their efforts at **persuasion**. When he succeeded in achieving major change, it was by mobilizing those ***predisposed* to support** him and driving legislation through Congress on a party-line vote.”

That’s easier said than done. We don’t have a system of government set up for Presidents to drive legislation through Congress. Rather, we have a system that was designed to encourage division between the branches but to resist the formation of political parties. The parties formed anyway, and they now use the branches to compete with one another. Add in minority protections like the filibuster, and you have a system in which the job of the President is to persuade an opposition party that has both the incentive and the power to resist him.

Jim Cooper says, “We’ve effectively lost our Congress and gained a parliament.” He adds, “At least a Prime Minister is empowered to get things done,” but “we have the extreme polarization of a parliament, with party-line voting, without the empowered Prime Minister.” And you can’t solve that with a speech.

#### Cant predict ‘fiscal cliff’ negotiations now – election will impact it too much

CGMC (Canaccord Genuity Morning Coffee, Canaccord Genuity Inc. is a global investment banking and institutional brokerage firm) September 21, 2012 “Fiscal cliff not likely to be resolved until lame duck” http://www.futuresmag.com/2012/09/21/fiscal-cliff-not-likely-to-be-resolved-until-lame

Credit Suisse does not believe a long term solution to these issues is likely in the lame duck session. Instead, they expect the Congress to approve a short-term extension for the various components of the fiscal cliff and address them more comprehensively next year. The manner in which these issues will be addressed is highly correlated to the election results and therefore it is difficult to determine what the construct of a final package will ultimately look like. Meantime, William Gale, Brookings’ chair of Federal Economic Policy and a former George H.W. Bush economist said this week that, "Going over the cliff may be the only way to get Republicans to negotiate any meaningful tax increases, given the no new taxes pledge."

#### Obama wont spend PC on the plan

James Rainey (writer for the LA Times) September 25, 2012 “Would President Obama try stimulus spending again?” http://www.latimes.com/news/politics/la-pn-obama-stimulus-20120924,0,169153.story

Many economists on the Democratic side have been arguing vehemently that the threat from long-term debt is not nearly as great as the long-term damage from allowing the recovery to continue to sputter, costing millions of jobs and the tax receipts that come with them. It’s hard to imagine today that Obama would expend much political capital in trying to win more government spending — given the Republican Party’s control of the House and the public’s lukewarm, at best, response to increasing the deficit. Given that reality, the pro-stimulus argument has been raised only fleetingly in Washington.

#### Political capital wont be key in the lameduck – Obama’s got no leverage even after winning

Eleanor Clift (Contributing Editor to Newsweek) September 30, 2012 “If Obama Wins, What Changes for His Second Term?” http://www.thedailybeast.com/articles/2012/09/30/if-obama-wins-what-changes-for-his-second-term.html

With an Obama second term looking like a better than even probability, short of sweeping both chambers of Congress, can the newly reelected president break the stalemate in Washington and govern successfully? He says the partisan fever will break once he cannot run again. He may be right, but President Obama will have to move quickly after the election to send the right signals of strength and resolve, and position himself to take advantage of the recriminations among Republicans that inevitably will surface in the wake of a Romney defeat.¶ If the GOP loses House seats and falls short of the four seats necessary to control the Senate, there’s an opening for Obama to woo disgruntled Republicans while keeping newly energized Democrats together. Like Clinton-era triangulation, the strategy is divide-and-conquer—except this time it’s applied to Republicans.¶ Does Obama have the chops to work more effectively with Congress? “There’s no better learning experience than the first term,” says former Senate leader Tom Daschle, an Obama confidant. The inexperienced president learned the hard way he can’t trust the other side, and with time has gotten bolder and better at wielding power. Republicans are still reeling from his changing the policy on deporting illegal immigrants without congressional approval.¶ But Obama doesn’t have many friends on Capitol Hill in either party. He has allies for sure but hasn’t worked to develop personal relationships. Some think this is a fatal flaw; others say schmoozing is overrated, that the Republicans were going to block Obama’s initiatives regardless of how many White House invites they got.¶ “Reagan didn’t always enjoy meeting with 535 members; it was a means to an end,” says Ken Duberstein, who worked in the Reagan White House, first in congressional relations, then as chief of staff. “You have to have the relationships—you have to know each other. Every White House screws up and you have to have a reservoir of good will.”¶ One adviser who did not want to be quoted recalls gently suggesting Obama might want to invest more personal time in courting members of Congress. “He looked at me like I was telling him to do 10 root canals.”¶ Tom Mann and Norman Ornstein, coauthors of It’s Even Worse Than It Looks, an indictment of Republican obstructionism, say it is “utter nonsense” to think more schmoozing is the answer. “For Obama to have a successful second term, he needs a different Republican Party,” says Mann. “He has to hope the election is decisive enough to rattle the party and make [the GOP] realize that a continued strategy of obstruction will not be good for them over the long haul.”

#### Treasury secretary nomination will handle the negotiations

Erza Klein (editor of Wonkblog and a columnist at the Washington Post, as well as a contributor to MSNBC and Bloomberg) October 1, 2012 “Wonkbook: The payroll tax cut looks done for” http://www.washingtonpost.com/blogs/ezra-klein/wp/2012/10/01/wonkbook-the-payroll-tax-cut-looks-done-for/

Obama is looking to line up another Treasury secretary for the second term. ”If re-elected, President Barack Obama is expected to move quickly in November to nominate a new Treasury secretary, and that person could play a key role negotiating with Congress about the looming ‘fiscal cliff’ of tax increases and spending cuts, people familiar with the planning said. The two people most frequently mentioned by current and former administration officials as likely successors to Treasury Secretary Timothy Geithner, who wants to leave the post, are White House Chief of Staff Jacob Lew and Clinton administration Chief of Staff Erskine Bowles.” Damian Paletta in The Wall Street Journal.

### 2ac 123

#### No link—Obama won’t push for no-ENR pledges

Lugar 12

Richard G. Lugar, former member of the Senate Foreign Relations Committee and coauthor of the Nunn-Lugar Cooperative Threat Reduction program, 2/21/12, Obama's Nuclear Misstep, nationalinterest.org/commentary/obamas-nuclear-mistake-6548

However, the United States and the United Arab Emirates took an important joint step forward when they concluded a nuclear pact that, for the first time, contained a commitment from the receiving country that it would neither enrich nor reprocess on its territory. This 123 agreement became known as "the Gold Standard." My hope was that this agreement, done entirely outside of the requirements of existing law and in a bipartisan manner across the Bush and Obama administrations, would form a new basis for U.S. nuclear trade and internationalize the sound decision made by the UAE and the United States. Such a model could become a bulwark against further countries engaging in enrichment and reprocessing. Thus, it also could have meant fewer places for potential proliferators to gain access to such technology and materials. Instead of making it a requirement for all new agreements, however, the administration announced in a recent letter to me that it has opted for a "case-by-case" approach with regard to the Gold Standard in new 123 agreements. I fear this means there will be few cases in which we shall see its return.

#### Your authors assume measures supported by nonprolif cred advocates—not what Obama would do

Grossman 12

Elaine Grossman, Global Security Newswire, 1/12/12, U.S. Nuclear Trade Talks with Vietnam, Jordan Moving Forward, www.nti.org/gsn/article/us-nuclear-trade-talks-vietnam-jordan-moving-forward/

Nonproliferation proponents have argued that the United States should advocate in nuclear trade negotiations with nations such as Vietnam, Jordan and potentially Saudi Arabia that any agreement contain a pledge not to enrich uranium or reprocess plutonium on their territory. These activities are useful for civil energy programs but could also open the door to the clandestine development of nuclear weapons, if a nation opts to move in that direction. The United Arab Emirates volunteered in its 2009 atomic trade pact with Washington to renounce a right to enrich or reprocess, but the Obama administration has been reluctant to necessarily demand this type of “no-ENR” pledge from every other cooperative-agreement partner with whom it negotiates.

#### Obama has displayed hesitance in negotiating 123 agreements – more leverage causes ENR renunciation

Lewis, 12 [August 1st, Jeffrey Lewis is director of the East Asia Nonproliferation Program at the James Martin Center for Nonproliferation, <http://www.foreignpolicy.com/articles/2012/08/01/it_s_not_as_easy_as_1_2_3?page=0,1>]

The Obama administration has been more hesitant, [saying instead](http://www.nti.org/gsn/article/administration-letter-promises-case-case-approach-nuclear-trade-deals/) that each new 123 agreement would be negotiated on a case-by-case basis. In other words, the administration would try to replicate the ban on enrichment and reprocessing when possible, while strongly suggesting that the UAE was a unique circumstance. That disappointed many nonproliferation experts -- both within the administration and without -- who believed that Washington was surrendering an opportunity to stem the spread of enrichment and reprocessing technology, even as the president continued to warn of the danger from weapons-usable nuclear material falling into the wrong hands. The gold standard languished in another policy review while the administration continued to negotiate 123 agreements -- until last week anyway, when, according to a [report published in National Journal](http://www.nationaljournal.com/nationalsecurity/state-department-sought-to-put-taiwan-nuclear-trade-pact-ahead-in-queue-20120727?print=true), the State Department made a play for a new 123 agreement with Taiwan. ¶ The Obama administration largely finds itself an accidental architect of the new civil nuclear order. In addition to a new wave of countries seeking nuclear help from the United States, many 123 agreements that were negotiated 30 years ago -- during the last wave of enthusiasm for nuclear power -- will expire between now and 2014. When this flurry of activity ends, the United States will have negotiated more than a dozen nuclear cooperation agreements in a four-year period, many with the most important emerging nuclear powers. Dick Stratford, a senior State Department official, told a conference that he carried around a little list in his pocket because he had trouble keeping all the negotiations straight. ¶ Although the moment is largely one of circumstance, the Obama administration has revealed a distinct philosophical approach, taking a market-oriented approach to discouraging new countries from building their own facilities for enrichment and reprocessing (sometimes called "ENR"). In practice this means exploring how to offer fuel-cycle services at reasonable prices and providing assurances that states that rely on the market, rather than their own capabilities, will not have their supply of fuel disrupted. The thinking goes that the United States can best discourage states from developing their own enrichment and reprocessing capabilities by ensuring that the nuclear industry provides such comprehensive fuel services as part of any agreement to sell nuclear reactors. If that helps U.S. industry and its international partners, all the better. (This is not yet a capability that U.S. industry can provide, particularly in the arena of taking back spent nuclear fuel.) The Obama administration has also supported the creation of separate U.S. and International Atomic Energy Agency (IAEA) "fuel banks" that would provide states that relied on the market a supplier of last resort in the event of a disruption in the supply of nuclear fuel. ¶ Before joining the Obama administration, Deputy Energy Secretary Daniel Poneman outlined a very similar approach in a 2004 [article](http://mit.edu/chemistry/deutch/policy/2004-MakingtheWorld.pdf) written with three colleagues titled "Making the World Safe for Nuclear Energy." A wag might note that a better goal is making nuclear energy safe for the world, but no matter. The best way to prevent the spread of ENR technology, Poneman and his colleagues argued, was to rely on "market forces … supplemented by government-to-government assurances that fuel services to users not be withheld for any reason other than a material violation of international non-proliferation commitments." This approach was decidedly all carrot and no stick because, Poneman and his colleagues warned, trying to dictate who is allowed to enrich and reprocess and who is not "will almost certainly ignite debates and passions that are more likely to strangle than to promote the prospects of this regime." Attempting to impose ENR restrictions, they concluded, might actually spur proliferation. ¶ Creating market incentives to discourage the spread of enrichment and reprocessing seems like a reasonable thing to do -- except that most states make nuclear decisions on something other than a cost basis. Nuclear power enthusiasts have been no strangers to wishful thinking, starting with claims that nuclear energy would be "too cheap to meter." Government decisions about nuclear power tend to prioritize concerns about sovereignty and keeping technological pace with neighbors. It is not hard to see national nuclear programs as something akin to national airlines -- money-losing prestige projects that barely take market forces into account. Often, aspiring nuclear states look to countries like the United States and Japan as models. If such countries invest heavily in fuel-cycle services, developing states might try to copy them rather than simply become their customers. ¶ That's why others in the nonproliferation community have argued that the United States should use its desirability as a partner in nuclear cooperation as leverage. States are unlikely to forgo ENR programs simply because the United States or others offer cheap alternatives. A little muscle is called for -- and circumstances have offered leverage: With more than a dozen new agreements to be negotiated, the Obama administration has an opportunity to write into many agreements a new, stronger nonproliferation standard.¶ So far, however, the administration has been reluctant to put the squeeze on potential partners. Many Obama officials took the view outlined by Poneman in his article -- that asking states to renounce ENR could make the situation worse. (It is important to note that I am not aware of Poneman's view inside the interagency deliberations.) So the administration has largely avoided pressuring states to renounce enrichment and reprocessing capabilities. Despite early talk of the "gold standard," this January the administration announced it would take what officials described as a case-by-case approach. In bureaucratic terms, this amounts to having no standard at all. It is hard to imagine a less restrictive policy. I suppose the administration could announce it would not even try. As it is, they will try -- but not very hard. ¶ The reaction on Capitol Hill to the "case-by-case" approach was bipartisan and hostile, in no small part because the UAE's pledge contains an "out" in the event another country in the region receives a 123 agreement without a "no ENR" pledge. It is one thing to not get a nonproliferation pledge; it is another thing to lose such a pledge, especially in a region as volatile and proliferation-prone as the Middle East.The possibility of losing the nonproliferation assurance in the UAE agreement became a central matter in negotiations with Jordan, and it looms as an issue with Saudi Arabia. Congressional Democrats and Republicans, including Howard Berman and Ileana Ros-Lehtinen,have introduced different pieces of legislation that would make it very difficult for any new 123 agreements that did not contain a pledge to forgo enrichment and reprocessing to receive approval on the Hill. In response, the Obama administration announced it would undertake another review. But it keeps negotiating.

#### And, leadership directly discourages reprocessing – stronger leadership is key

Hibbs, 12 [Mark Hibbs 12, SENIOR ASSOCIATE, NUCLEAR POLICY PROGRAM, Carnegie Endowment, “Negotiating Nuclear Cooperation Agreements,” NUCLEAR ENERGY BRIEF, AUGUST 7, 2012 <http://carnegieendowment.org/2012/08/07/negotiating-nuclear-cooperation-agreements/d98z>]

The outcome of any negotiation for a bilateral nuclear cooperation agreement will depend on the leverage both sides bring to the table. When the United States negotiated most of the 22 such agreements in force today, it was the world’s leading provider of nuclear technology, equipment, and fuel. As the examples of Jordan and Vietnam show, unlike half a century ago, nuclear newcomers today don’t need to buy American.¶ The vendor field is populated by firms in Argentina, Australia, Canada, the European Union, Japan, Kazakhstan, Namibia, Niger, Russia, and South Korea, and in the future they will be joined by others in China and India. Governments in these countries do not seek to establish a no-ENR requirement as a condition for foreign nuclear cooperation. Some of them, Australia and Canada for example, have strong nonproliferation track records. Countries now seeking to form foreign industrial partnerships to set up nuclear power programs have numerous options and they will favor arrangements that provide them the most freedom and flexibility.¶ Equity in international nuclear affairs matters. By negotiating with its partners voluntary political agreements, including side benefits to limit the application of sensitive technologies, instead of trying to legally compel them to make concessions that are politically onerous, the United States can serve its nonproliferation and security interests while avoiding the challenge to U.S. credibility that would follow from rigid application of a one-size-fits-all policy.¶ The United States should show nonproliferation leadership by generally discouraging countries without enrichment and reprocessing capabilities from embarking in this direction. But negotiators need policy guidelines that provide for flexibility and encourage them to create incentives to get desired results. To some extent, the current policy may be informed by the insight that trying to negotiate no-ENR terms into the operative text of an agreement may fail, and that other approaches may be more productive. It also reflects the reality that U.S. leverage on nuclear trade is declining.¶ In any case, negotiators and especially U.S. lawmakers—who must review and approve any new agreement—should not make the perfect the enemy of the good. If at the end of the day the United States must choose between having no agreement with a country and having an agreement without an unconditional and legally binding commitment to forego ENR, in specific instances, where the United States has little leverage and little to offer, the latter choice may be the right choice.¶ Right now, however, negotiators are not getting clear instructions from the top of the administration or from lawmakers about what new 123 agreements should require. In the case of some pending agreements, for example with Saudi Arabia, temporizing by U.S. leaders could set back U.S. economic and security interests. In some other countries, such as Australia and Canada, the cabinet approves a negotiating mandate before any bilateral nuclear cooperation talks take place. This kind of direction is needed in the United States, whether initiated by the White House or by Congress.

### 2ac k

#### Framework – the k must prove the whole plan is bad – any other interpretation kills fairness and trivializes effective decisionmaking skills

#### Extinction outweighs ontology

Jonas 96 [Hans, Former Alvin Johnson Prof. Phil. At the New School for Social Research & Former Eric Voegelin Visiting Prof. at U. Munich, \*do not agree with gendered language, Mortality and Morality: A Search for the Good after Auschwitz, pg 111-2

With this look ahead at an ethics for the future, we are touching at the same time upon the question of the future of freedom. The unavoidable discussion of this question seems to give rise to misunderstandings. My dire prognosis that not only our material standard of living but also our democratic freedoms would fall victim to the growing pressure of a worldwide ecological crisis, until finally there would remain only some form of tyranny that would try to save the situation, has led to the accusation that I am defending dictatorship as a solution to our problems. I shall ignore here what is a confusion between warning and recommendation. But I have indeed said that such a tyranny would still be better than total ruin; thus, I have ethically accepted it as an alternative. I must now defend this standpoint, which I continue to support, before the court that I myself have created with the main argument of this essay. For are we not contradicting ourselves in prizing physical survival at the price of freedom? Did we not say that freedom was the condition of our capacity for responsibility—and that this capacity was a reason for the survival of humankind? By tolerating tyranny as an alternative to physical annihilation are we not violating the principle we established: that the How of existence must not take precedence over its Why? Yet we can make a terrible concession to the primacy of physical survival in the conviction that the ontological capacity for freedom, inseparable as it is from man’s being, cannot really be extinguished, only temporarily banished from the public realm. This conviction can be supported by experience we are all familiar with. We have seen that even in the most totalitarian societies the urge for freedom on the part of some individuals cannot be extinguished, and this renews our faith in human beings. Given this faith, we have reason to hope that, as long as there are human beings who survive, the image of God will continue to exist along with them and will wait in concealment for its new hour. With that hope—which in this particular case takes precedence over fear—it is permissible, for the sake of physical survival, to accept if need be a temporary absence of freedom in the external affairs of humanity. This is, I want to emphasize, a worst-case scenario, and it is the foremost task of responsibility at this particular moment in world history to prevent it from happening. This is in fact one of the noblest of duties (and at the same time one concerning self-preservation), on the part of the imperative of responsibility to avert future coercion that would lead to lack of freedom by acting freely in the present, thus preserving as much as possible the ability of future generations to assume responsibility. But more than that is involved. At stake is the preservation of the Earth’s entire miracle of creation, of which our human existence is a part and before which man reverently bows, even without philosophical “grounding.” Here too faith may precede and reason follow; it is faith that longs for this preservation of the Earth (fides quaerens intellectum), and reason comes as best it can to faith’s aid with arguments, not knowing or even asking how much depends on its success or failure in determining what action to take. With this confession of faith we come to the end of our essay ontology.

#### Questions of [ontology/epistemology] are irrelevant to world politics – the specificity of our internal links proves the necessity of action

**Kratochwil, 08** [Friedrich Kratochwil is Assistant Professor of International Relations at Columbia University, Pragmatism in International Relations “Ten points to ponder about pragmatism” p11-25]

First, a pragmatic approach does not begin with objects or ‘things’ (ontology), or with reason and method (epistemology), but with ‘acting’ (prattein), thereby preventing some false starts. Since, as historical beings placed in a specific situations, we do not have the luxury of deferring decisions until we have found the ‘truth’ **we have to act** and **must do so always under time pressures** and **in the face of incomplete information**. Precisely because the social world is characterized by strategic interactions, what a situation ‘is’, is hardly ever clear ex ante, since it is being ‘produced’ by the actors and their interactions, and the multiple possibilities are rife with incentives for (dis)information. This puts a premium on quick diagnostic and cognitive shortcuts informing actors about the relevant features of the situation, and on leaving an alternative open (‘plan B’) in case of unexpected difficulties. Instead of relying on certainty and universal validity gained through abstraction and controlled experiments, we know that completeness and attentiveness to detail, rather than to generality, matter. To that extent, likening practical choices to simple ‘discoveries’ of an already independently existing ‘reality’ disclosing itself to an ‘observer’–or relying on optimal strategies – is somewhat heroic. These points have been made vividly by ‘realists’ such as Clausewitz in his controversy with von Buelow, in which he criticized the latter’s obsession with a strategic ‘science’ (Paret et al. 1986). While Clausewitz has become anicon for realists, a few of them (usually dubbed ‘old’ realists) have taken seriously his warnings against the misplaced belief in the reliability and usefulness of a ‘scientific’ study of strategy. Instead, most of them, especially ‘neorealists’ of various stripes, have embraced the ‘theory’-building based on the epistemological project as the via regia to the creation of knowledge. A pragmatist orientation would most certainly not endorse such a position. Second, since acting in the social world often involves acting ‘for’ someone, special responsibilities arise that aggravate both the incompleteness of knowledge as well as its generality problem. Since we owe special care to those entrusted to us, for example, as teachers, doctors or lawyers, we cannot just rely on what is generally true, but have to pay **special attention to the particular case**. Aside from avoiding the foreclosure of options, **we cannot refuse to act** on the basis of incomplete information or insufficient knowledge, and the necessary diagnostic will involve typification and comparison, reasoning by analogy rather than generalization or deduction. Leaving out the particularities of a case, be it a legal or medical one, in a mistaken effort to become ‘scientific’ would be a fatal flaw. Moreover, there still remains the crucial element of ‘timing’ – of knowing when to act. Students of crises have always pointed out the importance of this factor but, in attempts at building a general ‘theory’ of international politics analogously to the natural sciences, such elements are neglected on the basis of the ‘continuity of nature’ and the ‘large number’ assumptions. Besides, ‘timing’ seems to be quite recalcitrant to analytical treatment. Third, the cure for anxiety induced by Cartesian radical doubt does not consist in the discovery of a ‘foundation’ guaranteeing absolute certainty. This is a phantasmagorical undertaking engendered by a fantastic starting point, since nobody begins with universal doubt! (Peirce 1868). Rather, the remedy for this anxiety consists in the recognition of the unproductive nature of universal doubt on the one hand, and of the fetishization of ‘rigour’ on the other. Letting go of unrealizable plans and notions that lead us to delusional projects, and acquiring instead the ability to ‘go on’ despite uncertainties and the unknown, is probably the most valuable lesson to learn. Beginning somewhere, and reflecting critically on the limitations of the starting point and the perspective it opened, is likely to lead to a more fruitful research agenda than starting with some preconceived notions of the nature of things, or of ‘science’, and then testing the presumably different (but usually quite similar) theories (such as liberalism and realism). After all, ‘progress’ in the sciences occurred only after practitioners had finally given up on the idea that in order to say something about the phenomena of the world (ta onta), one had to grasp first ‘being’ itself (to ontos on). Fourth, by giving up on the idea that warranted knowledge is generated either through logical demonstration or through the representation of the world ‘out there’, a pragmatic starting point not only takes seriously the always preliminary character of knowledge, it also promises that we will learn to follow a course of action that represents a good bet.7 Thus, it accounts for changes in knowledge in a **more coherent fashion**. If the world were ‘out there’, ready-made, only to be discovered, scientific knowledge would have to be a simple accumulation of more and more true facts, leading us virtually automatically closer and closer to ‘the TRUTH’. Yet, if we have learned anything from the studies of various disciplines, it is the fact that progress consists in being able to formulate new questions that could not even be asked previously. Hence, whatever we think of Kuhn’s argument about ‘paradigms’, we have to recognize that in times of revolutionary change the bounds of sense are being redrawn, and thus the newly generated knowledge is not simply a larger sector of the encircled area (Kratochwil 2000). Fifth, pragmatism recognizes that science is social practice, which is determined by rules and in which scientists not only are constitutive for the definitions of problems (rather than simply lifting the veil from nature), but they also debate seemingly ‘undecidable’ questions and weigh the evidence, instead of relying on the bivalence principle of logic as an automatic truth-finder (Ziman 1991; Kratochwil 2007a). To that extent, the critical element of the epistemological project is retained, but the ‘court’, which Kant believed to be reason itself, now consists of the practitioners themselves. Instead of applying free-standing epistemological standards, each science provides its own court, judging the appropriateness of its methods and practices. Staying with the metaphor of a court, we also have to correct an implausible Kantian interpretation of law – that it has to yield determinate and unique decisions. We know from jurisprudence and case law that cases can be decided quite differently without justifying the inference that this proves the arbitrariness of law. Determinacy need not coincide with uniqueness, either in logic (multiple equilibria), science (equifinality) or law – Ronald Dworkin (1978) notwithstanding! Sixth, despite the fact that it is no longer a function of bivalent truth conditions, or anchored neither in the things themselves (as in classical ontology) nor in reason itself, ‘truth’ has not been abolished or supplanted by an ‘anything goes’ attitude. Rather, it has become a procedural notion of rule-following according to community practices, since nobody can simply make the rules as she or he goes along. These rules do not ‘determine’ outcomes, as the classical logic of deductions or truth conditions suggest, but they do constrain and enable us in our activities. Furthermore, since rule-following does not simply result in producing multiple copies of a fixed template, rules provide orientation in new situations, allowing us to ‘go on’, making for both consistency and change. Validity no longer assumes historical universality, and change is no more conceived of as temporal reversibility, as in differential equations, where time can be added and multiplied, compared with infinity, and run towards the past or the future. Thus ‘History’ is able to enter the picture, and it matters because, differently from the old ontology, change can now be conceived of as a ‘path-dependent’ development, as a (cognitive) evolution or even as radical historicity, instead of contingency or decay impairing true knowledge. Consequently, time-bound rather than universal generalizations figure prominently in social analysis, and as Diesing, a philosopher of science, reminds us, this is no embarrassment. Being critical of the logical positivists’ search for ‘laws’ does not mean that only single cases exist and that no general statements are possible. It does mean, however, that in research: there are other goals as well and that generality is a matter of degree. Generalizations about US voting behaviour can be valid though they apply only between 1948–72 and only to Americans. Truth does not have to be timeless. Logical empiricists have a derogatory name for such changing truths (relativism); but such truths are real, while the absolute, fully axiomatized truth is imaginary. (Diesing 1991:91) Seventh, the above points show their importance when applied not only to the practices of knowledge generation but also to the larger problem of the reproduction of the social world. Luhmann (1983) suggested how rule-following solves the problem of the ‘double contingency’ of choices that allows interacting parties to relate their actions meaningfully to each other. ‘Learning’ from past experience on the basis of a ‘tit for tat’ strategy represents one possibility for solving what, since Parsons, has been called the ‘Hobbesian problem of order’. This solution, however, is highly unstable, and thus it cannot account for institutionalized behaviour. The alternative to learning is to forgo ‘learning’. Actors must abstract from their own experiences by trusting in a ‘system of expectations’ which is held to be counterfactually valid. ‘Institutionalization’ occurs in this way, especially when dispute-settling instances emerge that are based on shared expectations about the system of expectations. Thus, people must form expectations about what types of arguments and reasons are upheld by ‘courts’ in case of a conflict (Luhmann 1983). Eighth, a pragmatic approach, although sensitive to the social conditions of cognition, is not simply another version of the old ‘sociology of knowledge’, let alone of utilitarianism by accepting ‘what works’ or what seems reasonable to most people. It differs from the old sociology of knowledge that hinged on the cui bono question of knowledge (Mannheim 1936), since no argument about a link between social stratification and knowledge is implied, not to mention the further-reaching Marxist claims of false consciousness. A pragmatist approach, however, is compatible with such approaches as Bourdieu’s (1977) or more constructivist accounts of knowledge production, such as Fuller’s (1991) social epistemology, because it highlights the interdependence of semantics and social structures. Ninth, as the brief discussion of ‘science studies’ above has shown, it is problematic to limit the problem of knowledge production to ‘demonstrations’ (even if loosely understood in terms of the arguments within the scientific community), thus neglecting the factors that are conducive to (or inhibitive of) innovation in the definition of problems. To start with, antecedent to any demonstration, there has to be the step of ‘invention’, as the classical tradition already suggested. In addition, although it might well be true that ‘invention’ does not follow the same ‘logic’ as ‘testing’ or demonstrating, this does not mean that these considerations are irrelevant or can be left outside the reflection on how knowledge is generated. To attribute originality solely to a residual category of a rather naively conceived individual ‘psychology of discovery’, as logical positivism does, will simply not do. After all, ‘ideas’ are not representations and properties of the individual mind, but do their work because they are shared; innovation is crucially influenced by the formal and informal channels of communication within a (scientific) community. While the logical form of refutability in principle is, for logical positivists, a necessary element of their ‘theoretical’ enterprise, it does not address issues of creativity and innovation, which are a crucial part of the search for knowledge. Corroborating what we already suspected is interesting only if such inquiries also lead to novel discoveries, since nobody is served by ‘true’ but trivial results. Quite clearly, the traditional epistemological focus is much too narrow to account for and direct innovative research, while pragmatic approaches have notoriously emphasized the creativity of action (Rochberg-Halton 1986). Tenth, the above discussion should have demonstrated that a pragmatic approach to knowledge generation is not some form of ‘instrumentalism’ á la Friedman (1968), perhaps at basement prices, or that it endorses old wives’ tales if they generated ‘useful predictions’, even though for rather unexplainable reasons. Thus, buying several lottery tickets on the advice of an acquaintance to rid oneself of debts and subsequently hitting the jackpot neither qualifies as a pragmatically generated solution to a problem nor does it make the acquaintance a financial advisor. Although ‘usefulness’ is a pragmatic standard, not every employment of it satisfies the exacting criteria of knowledge production. As suggested throughout this chapter, a coherent pragmatic approach emphasizes the intersubjective and critical nature of knowledge generation based on rules, and it cannot be reduced to the de facto existing (or fabricated) consensus of a concrete group of scientists or to the utility of results, the presuppositions of which are obscure because they remained unexamined. Conclusions No long summary of argument is necessary here. Simply, a pragmatic turn shows itself to be consistent with the trajectory of a number of debates in the epistemology of social sciences; it also ties in with and feeds into the linguistic, constructivist and ‘historical’ turns that preceded it; and finally, it is promising for the ten reasons listed above. While these insights might be useful correctives, they do not by themselves generate viable research projects. This gain might have been the **false promise of the epistemological project** and its claim that simply following the path of a ‘method’ will inevitably lead to secure knowledge. Disabusing us of this idea might be useful in itself because it would redirect our efforts at formulating and conceptualizing problems that are antecedent to any ‘operationalization’ of our crucial terms (Sartori 1970), or of any ‘tests’ concerning which ‘theory’ allegedly explains best a phenomenon under investigation.

2ac nu lv heidegger

#### Alienated survivalism is the human condition -- their alternative is simply an ontological maskJoaquin Trujillo, PhD Philosophy Florida International University in Janus Head Vol. 6 No. 1 Spring, 2003

http://www.janushead.org/6-1/Trujillo.pdf

At the same time, alienation, reification, and, to a certain extent, rapture are not foreign to daily life and should not necessarily be decried as existentials. Simply because the terrorist is alienated to his truth does not necessarily indicate that it is a problem that begs solution. Although his acts and statements warrant condemnation, the situation of the Islamic terrorist should not necessarily be disparaged in a time that is increasingly defined by relativism, arbitrariness and ideological non-sense. The terrorist’s approach to truth may be fundamentally flawed, but it also seems to provide certain existential rewards found lacking in other cultures. Alienation, reification and rapture are “de facto characteristics of the human condition” that facilitate the species’ survival (Berger & Ullberg, 1965, p. 201). Because of its pre-conceptual concern for Being and incessant need to deal with the exigencies of daily life, There-being typically responds to the World as a reality that exists independently of its transcendence (Berger & Luckman, 1966, p. 61). Said differently, we typically facilitate our engagement with beings when we objectify transcendence.

**Permutation -- use the plan to grab a hold of Time with a fluidity of action that recognizes its own finitude**

**Critchley '9** Simon, Professor of Philosophy at the New School "Heidegger's Being and Time, part 8: Temporality"

<http://www.guardian.co.uk/commentisfree/belief/2009/jul/27/heidegger-being-time-philosophy>

Firstly, **he is trying to criticise the idea of time as** a uniform, linear and **infinite series of "now-points".** On this model, which derives ultimately from [Aristotle's Physics](http://classics.mit.edu/Aristotle/physics.html), the future is the not-yet-now, the past is the no-longer-now, and the present is the now that flows from future to past at each passing moment. **This is what Heidegger calls the "vulgar" or ordinary conception of time where priority is always given to the present.** Heidegger thinks that this Aristotelian conception of time has dominated philosophical inquiries into time from the ancient Greeks to Hegel and even up to his near contemporary [Bergson](http://en.wikipedia.org/wiki/Henri_Bergson). Secondly, he is trying to avoid any conception of time that begins with a distinction between time and eternity. On this understanding of time, classically expressed in Augustine's Confessions, temporality is derived from a higher non-temporal state of eternity, which is co-extensive with the infinite and eternal now of God. In order to understand what Heidegger means by temporality, we have to set it in the context of the existential analytic of *Dasein* that I have sought to describe. The discussion of [being-towards-death in blog six](http://www.guardian.co.uk/commentisfree/belief/2009/jul/13/heidegger-being-time) led to the idea of anticipation, namely that the human being is always running ahead towards its end. For Heidegger, the primary phenomenon of time is the future that is revealed to me in my being-towards-death. Heidegger makes play of the link between the future (*Zukunft*) and to come towards (*zukommen*). **Insofar as *Dasein* anticipates, it comes towards itself. The human is not confined in the present, but always projects towards the future. But what *Dasein* takes over in the future is its basic ontological indebtedness**, its guilt, as discussed in the previous blog. There is a tricky but compelling thought at work here: **in anticipation, I project towards the future, but what comes out of the future is my past, my personal and cultural baggage, what Heidegger calls my "having-been-ness"** (*Gewesenheit*). But this does not mean that I am somehow condemned to my past. On the contrary, I can make a decision to take over the fact of who I am in a free action. This is what Heidegger calls "resoluteness". This brings us to the present. For Heidegger, the present is not some endless series of now points that I watch flowing by. Rather, the present is something that I can seize hold of and resolutely make my own. What is opened in the anticipation of the future is the fact of our having-been which releases itself into the present moment of action. This is what Heidegger calls "the moment of vision" (*Augenblick*, literally "glance of the eye"). This term, borrowed from [Kierkegaard](http://plato.stanford.edu/entries/kierkegaard/) and [Luther](http://www.bbc.co.uk/history/historic_figures/luther_martin.shtml), can be approached as a translation of the Greek *kairos*, the right or opportune moment. Within Christian theology, the *kairos* was the fulfilment or redemption of time that occurred with the appearance of Christ. Heidegger's difference with Christian theology is that he wants to hang on to the idea of the moment of vision, but to do so without any reference to God. What appears in the moment of vision is authentic *Dasein*. To put the matter mildly, it is a moot point whether Heidegger can inhabit these Christian forms without accepting or at least aping their content. The key to Heidegger's understanding of time is that it is neither simply reducible to the vulgar experience of time, nor does it originate in distinction from eternity. Time should be grasped in and of itself as the unity of the three dimensions – what Heidegger calls "ecstases" – of future, past and present. This is what he calls "primordial" or "original" time and he insists that it is finite. It comes to an end in death. **For Heidegger, we are time**. Temporality is a process with three dimensions which form a unity. The task that Heidegger sets himself in Being and Time is a description of the movement of human finitude. As many readers have pointed out and Heidegger himself acknowledged, Being and Time is unfinished. The question that he leaves hanging at the end of the book is the issue that began the whole enterprise, namely the question of being as such. We have been given an answer to the question what it means to be human, but no sense of how we might answer the question of being as such. The task that Heidegger set himself, from the publication of Being and Time in 1927 to his death nearly a half-century later in 1976, was the elucidation of that question.

#### And, it doesn’t come first – the alt is nihilism – internal link turns value to life

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That Heidegger transforms happiness, classically understood as the completion of human nature, into the anxiety of being-towards-death may be deduced from the fact that it is death which signifies Dasein's "authentic potentiality-for-being-a-whole," (45) **with the consequence that ethical virtue is replaced by Dasein's pure resolve in the face of nothing**. That Heidegger's conception of care may likewise be construed as an impoverished version of the Platonic doctrine of eros is plainly evident by its purely formal structure, which renders it devoid of any capacity to rank-order objects of desire. (46) By way of contrast, Platonic eros moves hierarchically between the human and the divine (that is to say, between the base and the noble), whereas Heideggerian care moves horizontally, we should even say "horizonally," in the sense that "the ontological meaning of care is temporality," and "the existential-temporal condition of the possibility of the world lies in the fact that temporality, as an ecstatical unity [of future, past, and, present], has something like a horizon." (47) That horizon is circumscribed by Dasein's thrownness into the future, and Dasein's ownmost future is, of course, its death. Hence we read, "The primary phenomenon of primordial and authentic temporality is the future," and "The ecstatical character of the primordial future lies precisely in the fact that the future closes one's potentiality-for-being." (48) It is therefore through Dasein's resolute anticipation of its death that the meaning of being reveals itself as the "temporalizing of temporality." (49) But temporality reduced to itself is stripped of all love, beauty, and value. **It means simply the opening up of one's future possibilities, which is to say that the authentic meaning of being is without value, and being without value is meaningless, which is finally to say that the meaning of being terminates in nihilism.** (50) Heideggerian fundamental ontology does not therefore escape from Nietzschean chaos. Rather, it returns us to it, only without the noble illusion that life requires us to make it lovable. (51) **And this remains the case no matter whether we prefer the early language of "resoluteness" or Heidegger's later "turn" into Gelassenheit or "releasement."** For insofar as Heidegger's turn (Kehre) is meant to free the meaning of being from its attachment to any notion of active or passive willing, for example, of the kind indicated by the language of resolution, it releases us ever deeper into the nullity within which the world comes to presence. (52)

So much for the meaning of being. Despite his revolutionary proclamations, Heidegger holds us in a double bind. On the one hand, the history of metaphysics (and its completion in the era of modern technology) (53) grips us in a nihilistic forgetting of the question of being. On the other hand, fundamental ontology empties the meaning of being of value, and this too is nihilism. (54) What matters in the last analysis, however, is not whether Heidegger is a nihilist, but whether his teaching is the true teaching. And if, as Leo Strauss once said, our capacity to evaluate Heidegger's teaching comes down to a question of competence, our measure of competence depends on our capacity for valuation, or more accurately, for prudential judgment or a capacity to discern what makes it right. (55) Yet, on the basis of Heidegger's existential analysis, there can be no such ground of legitimation apart from the pure instance of resolution (Entschluss). And this is because fundamental ontology cannot tell us on the basis of its questioning into being why such questioning should be desirable, or why we should want to invoke a spiritual revolution that founds itself on the abstract question of being. **Instead, there must be some more primordial notion of the good that first directs us to the question of being**--as Nietzsche would say, to the question of being as a value. In saying this, however, I do hot wish to suggest that there must be some objective or quasi-objective standard of the good that is somehow "out there" waiting to be discovered, as if it were a vein of gold embedded in the rock. Yet it is plainly evident that a more primordial access to the good must underlie any capacity for rank-ordering values or existential possibilities, and it is precisely this feature of human experience that fundamental ontology abandons or occludes by abstracting the question of being from the so-called ontic or inauthentic dimension of ordinary experience.

Stated simply, **there is no reason why the question of being should be foundational for the future of philosophy**. Yet it must be said that Heidegger never relinquished his revolutionary aspirations for bringing metaphysics to its end. For as clearly as the text of 1927 stated the need to put the future of philosophy on "new foundations" (neue Fundamente), (56) Heidegger persisted up to and through 1959 in the hope that the turn to the question of being would promise a "new ground and foundation" (neuen Grand und Boden) upon which it might be possible to confront the epoch of metaphysical nihilism. (57) Of course, it may be entirely true that our releasement into the mystery of being grants us "the possibility of dwelling in the world in a totally different way." (58) **The question is why this should be at all desirable, especially if the thinking of being expires in nihilism.** And it is here that we find Heidegger without argument. As we read in a relevant passage from the "Letter on Humanism" of 1949:

Whether the realm of the truth of being is a blind alley or whether

it is the free space in which freedom conserves its essence is

something each one may judge after he himself has tried to go the

designated way, or even better, after he has gone a better way,

that is, a way befitting the question. (59)

I note in passing that we shall also have to judge whether the essence of freedom is itself a blind alley. But this just affirms my larger point. Heidegger returns us to the question of competence. But since fundamental ontology cannot stand the question of competence, we are left simply with a decision that leaves the future of philosophy hanging on the angst-ridden resolve that affirms itself in the face of death. (60) And this is Cartesianism all over again, in the sense that Heidegger's subordination of ethics to ontology--the decisive severing of the human relation to the good from the foundations of philosophy--amounts to the most radical late modern expression of the Cartesian legacy. **Rather than saving us from our fall into modern decadence, Heidegger's thought results finally in a deepening of the modern crisis.**

#### Calculative thought inevitable – they’ve calculated how to use the K to win a ballot

#### And, the alt collapses politics and causes global destruction

Biskowski 95 [Lawrence J. professor of political theory and political economy at the University of Georgia, “Politics versus Aesthetics: Arendt's Critiques of Nietzsche and Heidegger”, The Review of Politics, Vol. 57, No. 1, Winter 1995, pg 59-89]

Although Arendt considered Heidegger to be perhaps the most important philosopher of the twentieth century, she always objected to the political dangers and deformations inherent in this emphasis on the self. Heidegger's philosophy led him away from the common, public world and directed his gaze inward toward the self.67 But this could not help but distort his political judgment, which must take its bearings from the public world. Instead, as we have seen, Heidegger associates the public world with inauthentic existence, a pernicious form of socialization, and a falling away from true Being. In fact, Arendt says, he dismisses all those modes of human existence which rest on the fact that Man lives together in the world with his fellows. To put it historically, Heidegger's Self is an ideal which has been working mischief in German philosophy and literature since Romanticism. In Heidegger this arrogant passion to be a self has contradicted itself; for never before was it so clear as in his philosophy that this is probably the one being which Man cannot be.6

Without the world as a source of political and moral orientation, the self and its death become Heidegger's central concern: Only in the realization of death, which will take him away from the world, has Man the certainty of being himself...in other words, the essential character of Man's Being is determined by what he is not, his nothingness...Death may indeed be the end of human reality; at the same time it is the guarantee that nothing matters but myself. With the experience of death as nothingness I have the chance of devoting myself exclusively to being a Self, and once and for all freeing myself from the surrounding world.69 For Arendt, on the contrary, authentic existence is never isolated in this egoistic way but rather exists only in acknowledgment of and communication with others. It can develop only in the togetherness of human beings in the common, public world. The sort of fascination with the self advocated by Heidegger leaves one disconnected from the multiform, multiperspectival reality of the political world. Among its consequences are a failure to comprehend political events, poor judgment, and a peculiar form of political irresponsibility. Arendt first develops this theme in Rahel Varnhagen where the not altogether different Romantic cult of interiority is criticized. The turn inward toward the self made Rahel and the intellectuals and artists in her circle blind to political reality.70 Similarly, in The Origins of Totalitarianism, Arendt sees romantic self-fascination as contributing to the general conditions which made the twentieth century mass movements and their horrors possible.71 A resurgent romanticism in intellectual life may be symptomatic of a general playfulness of modern thought in which almost any opinion can gain ground temporarily. No real thing, no historical event, no political idea was safe from the all-embracing and all-destroying mania by which these first literati could always find new and original opportunities for new and fascinating opinions.72 This playfulness, which certainly has its advocates among today's literati, is one manifestation of the general condition of world-alienation which appears as a persistent theme in much of Arendt's work. Whatever the undoubted aesthetic, agonistic, or expressivist aspects or moments of action (which Arendt recognizes and emphasizes, particularly in contradistinction to instrumental rationality and those philosophies and worldviews which tend to reduce history and human life to a mere process), she makes clear that action and politics cannot be reduced to or even thought of merely in terms of aesthetic self-expression: "Human plurality, the faceless 'They' from which the individual Self splits to be itself alone is divided into a great many units, and it is only as a member of such a unit, that is, of a community, that men are ready for action."73 These communities and their institutions depend for continued existence upon acting men; their conservation is achieved by the same means that brought them into being...[U]tter dependence upon further acts to keep it in existence marks the state as a product of action.74 Finally, Arendt tells us, "the inspiring principle of action is love of freedom, and this both in the negative sense of freedom from oppression and in the positive sense of the establishment of Freedom as a stable, tangible reality."75 Precisely this is the task of politics. But Heidegger's turn inward and away from the political world has a pedigree that goes beyond romanticism. Arendt consistently maintained that even though Heidegger rivals Nietzsche as a critic of the philosophical tradition, he too shares its general regard for "the incomprehensible triviality" of the common, public world, the only escape from which is withdrawal "into that solitude which philosophers since Parmenides and Plato have opposed to the political realm."76 Indeed, Heidegger no less than Plato personified to Arendt what might be called the professional thinker, and succumbed to the characteristic temptations of the profession.77 Arendt makes clear that all thinking requires some measure of aloofness, seclusion, and distance from the world,78 but this characteristic is amplified and expanded in Heidegger's philosophy. In Dasein, thinking and being alive fold in on one another and become one.79 Authentic existence requires thinking, which in turn requires distance from "the they" and everyday life. Immersion in everyday life constitutes and requires withdrawal from true Being. For Heidegger, not unlike Plato, thinking requires one to leave the cave of worldly affairs. But as we have seen, Arendt suggests that such a departure may result in a loss of moral-practical orientation.80 And this constitutes in the end perhaps the best explanation of why Heidegger's awesome ability to think did not prevent him from evil-doing in the form of **his support for** the **Nazis**.81 Heidegger eventually turned away from the emphasis on self-assertion and Dasein's "ownmost" state of being found in Being and Time.8 As Arendt tells the story, Heidegger's intense study of Nietzsche led him to see even his own previous philosophy as having been motivated by a form of will to power.83 Still concerned that instrumental rationality, science, and technology degraded Dasein by reducing everything to presence-at-hand, he came to see his own philosophy as "enframed" in the very same refusal to let beings be at the heart of the Western technological worldview he so detested. The new alternative Heidegger formulated was a Zen-like attitude or disposition of serene, gliding aloofness-Gelassenheit-in which state thinkers would refrain from attempting to impose their own will on beings (whether through technology or even through arguing for "ownmost" or "most authentic" modes of being). Thus, like Nietzsche, Heidegger eventually repudiates the will, a capacity Arendt sees as necessary for action and freedom. But more significantly, Heidegger's turn or reversal leaves him as alienated from politics and the common, public world as before. From the point of view of Arendtian politics, Heidegger has merely exchanged one form of world-alienation (glorification of self-assertion and extrication from "the they") for another (a regarding of the world simply as an object of contemplation). Arendt shares with the early Heidegger the notion that to be in the world is to be a locus of understanding, possibility, and freedom in the midst of a surrounding texture of meaning and significance. For the early Heidegger, however, the world serves primarily as a medium for the aesthetic expression of the self. After his Kehre, the world became something primarily to be regarded with serene, disinterested, contemplative wonder. This marked a return to the origins of philosophy in thaumazein. But philosophy and politics **are not the same**; the latter requires active engagement with the world, at least if the world is to be a fit home for mortal beings endowed with the capacity for action and the possibility of freedom.

#### And, the alt fails – thought is too engrained

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\*\* Gestell (or sometimes Ge-stell) is a [German](http://en.wikipedia.org/wiki/German_language) word used by twentieth century German [philosopher](http://en.wikipedia.org/wiki/Philosophy) [Martin Heidegger](http://en.wikipedia.org/wiki/Martin_Heidegger) to describe what lies behind or beneath modern [technology](http://en.wikipedia.org/wiki/Technology).[[1]](http://en.wikipedia.org/wiki/Gestell#cite_note-0)

Moreover, Heidegger maintains: ‘‘Readiness-to-hand is the way in which entities as they are ‘in themselves’ are defined ontologico-categorially.’’47 According to Heidegger’s fundamental phenomenology, which he unfolds in detail in Being and Time and reaffirms a decisive part of in ‘‘The Question Concerning Technology,’’ nature is ‘‘primally’’ revealed in its ‘‘usability’’ and ‘‘serviceability-for-;’’ that is to say, **‘‘nature’’ is a resource long before the actual rise of modern** and ancient **technology**, namely **simultaneously with the** very **origin of human beings**. That something is primordially revealed in its ‘‘usability’’ and ‘‘serviceability-for-’’ does not imply that it is actually used or serves accordingly, but that it is revealed as standing ready to be utilized in the corresponding context. As such, it is revealed as ‘‘standing-reserve.’’ This, for example, also corresponds to the empirical fact that prehistoric humans settled close to woods and rivers. In these areas they always had stockpiles of timber, power for transportation, and easy access to drinking water. Based on ‘‘The Question Concerning Technology’’ and completed through references to Being and Time, we now have an interpretation of the origin of the essence of modern technology, which traces back the characteristic revealing of das Gestell to the beginning of humankind.48 This does not imply that prehistoric technology is identical with contemporary technology; rather the third genealogy of the rule of das Gestell suggests that when ‘‘we still more primally’’ try to consider the origin of the challenging revealing characterizing the rule of das Gestell, we in fact rediscover that it is connected to being human. The rule of das Gestell has challenged humans **as long as they have existed**. In this sense, humans **first and foremost exist under the rule of das Gestell**.49 This also entails a revision and precision of Heidegger’s renowned formula characterizing the world-connectedness of human existence: being-in-the-world. Based on the comparison of ‘‘The Question Concerning Technology’’ and Being and Time, human existence is better described as being-under-the-spell-of-das-Gestell. Trying to understand the various more-or-less explicit accounts of the origin of the rule of das Gestell in ‘‘The Question Concerning Technology’’ and the resulting ambiguity is not just an exercise, nor only a way to criticize Heidegger. Rather, it is a way to better understand the nuances and layers in Heidegger’s thinking concerning technology and to warn against a short-sighted ‘‘saving’’ from an alleged danger. If the challenging revealing of nature, which characterizes the rule of das Gestell is taken seriously, then we cannot avoid it just by revolutionizing our technology, instead, we must revise our very human existence.

#### And, permutation < >

That solves best – incorporation affirms unavoidable use, but denies domination

Dreyfus, 06 (Professor of Philosophy at the University of California, Berkeley (Hubert, "Nihilism, Art, Technology, and Politics", the Cambridge Companion to Heidegger)

Heidegger, however, sees that "it would be foolish to attack technology blindly. It would be shortsighted to condemn it as the work of the devil. We depend on technical devices; they even challenge us to ever greater advances."(DOT 53, G 24) Instead, Heidegger suggests that there is a way we can keep our technological devices and yet remain true to ourselves as receivers of clearings: **We can affirm the** unavoidable **use of technical devices, and** also **deny them the right to dominate us**, and so to warp, confuse, and lay waste our nature. (DOT 54, G 24-25) To understand how this might be possible, we need an illustration of Heidegger's important distinction between technology and the technological understanding of being. Again we can turn to Japan. In contemporary Japan traditional, nontechnological practices still exist alongside the most advanced high-tech production and consumption. The TV set and the household gods share the same shelf – the styrofoam cup co-exists with the porcelain tea cup. We thus see that the Japanese at least, can enjoy technology without taking over the technological understanding of being. For us to be able to make a similar dissociation, Heidegger holds, we must rethink the history of being in the West. Then we will see that although a technological understanding of being is our destiny, it is not our fate. That is, although our understanding of things and ourselves as resources to be ordered, enhanced, and used efficiently has been building up since Plato, we are not stuck with that understanding. Although the technological understanding of being governs the way things have to show up for us, we can hope for a transformation of our current cultural clearing. Only those who think of Heidegger as opposing technology will be surprised at his next point. Once we see that technology is our latest understanding of being, we will be grateful for it. This clearing is the cause of our distress, yet if it were not given to us to encounter things and ourselves as resources, nothing would show up as anything at all, and no possibilities for action would make sense. And **once we realize** -- in our practices, of course, not just as matter of reflection -- that we receive our technological understanding of being, **we have stepped out of** the **technological understanding** of being, for **we then** see that what is most important in our lives is not subject to efficient enhancement -- indeed, the drive to control everything is precisely what we do not control. This transformation in our sense of reality -- this overcoming of thinking in terms of values and calculation -- is precisely what Heideggerian thinking seeks to bring about. Heidegger seeks to make us see that our practices are needed as the place where an understanding of being can establish itself, so we can overcome our restricted modern clearing by acknowledging our essential receptivity to understandings of being.

#### And, abandoning empiricsm causes them to foreget being

Latour 2 – Professor, Paris Institute of Political Studies (Bruno, Environmentalism, ed Direk, p 303)

Who has forgotten Being? No one, no one ever has, otherwise Nature would be truly available as a pure 'stock'. Look around you: scientific objects are circulating simultaneously as subjects objects and discourse. Networks are full of Being. As for machines, they are laden with subjects and collectives. How could a being lose its difference, its incompleteness, its mark, its trace of Being? This is never in anyone's power; otherwise we should have to imagine that we have truly been modern, we should be taken in by the upper half of the modern Constitution. Has someone, however, actually forgotten Being? Yes: anyone who really thinks that Being has really been forgotten. As Levi-Strauss says, 'the barbarian is first and foremost the man who believe in barbarism.' (Levi-Strauss, [1952] 1987. p. 12). Those who have failed to undertake empirical studies of sciences, technologies, law, politics, economics, religion or fiction have lost the traces of Being that are distributed everywhere among beings. If, scorning empiricism, you opt out of the exact sciences, then the human sciences, then traditional philosophy, then the sciences of language, and you hunker down in your forest -- then you will indeed feel a tragic loss. But what is missing is you yourself, not the world! Heidegger's epigones have converted that glaring weakness into a strength. 'We don't know anything empirical, but that doesn't matter, since your world is empty of Being. We are keeping the little flame of Being safe from everything, and you, who have all the rest, have nothing.' On the contrary: we have everything, since we have Being, and beings, and we have never lost track of the difference between Being and beings. We are carrying out the impossible project undertaken by Heidegger, who believed what the modern Constitution said about itself without understanding that what is at issue there is only half of a larger mechanism which has never abandoned the old anthropological matrix. **No one can forget Being, since there has never been a modern world**, or, by the same token, metaphysics. We have always remained pre-Socratic, pre-Cartesian, pre-Kantian, pre-Nietzschean. No radical revolution can separate us from these pasts, so there is no need for reactionary counter-revolutions to lead us back to what has never been abandoned. Yes, Heraclitus is a surer guide than Heidegger: 'Einai gar kai entautha theous.'

#### And, their ontology is totalizing – causes totalitarianism

Gauthier 04 (David, Phd Candidate in Poly Sci @ Lousiana State, "MARTIN HEIDEGGER, EMMANUEL LEVINAS, AND THE POLITICS OF DWELLING," http://etd.lsu.edu/docs/available/etd-11052004-163310/unrestricted/Gauthier\_dis.pdf)

As this chapter has noted, Levinas’s emphasis on “the reality of persecuted people in the daily history of the world” informs his critique of Heidegger. Levinas’s critique of Heideggerian ontology identifies how the ontological, anti-humanistic, and pagan cast of the latter’s thought is inherently **totalizing**. This can be viewed as the first of Levinas’s two principal objections to fundamental ontology. The second major objection, which I have ignored until now, relates to its political consequences. In sum, **fundamental ontology necessarily leads to tyranny**: “Even though it opposes the technological passion issued forth from the forgetting of Being hidden by the existent, Heideggerian ontology, which subordinates the relationship with the Other to the relationship with Being in general, remains under obedience to the anonymous and **leads inevitably to another power, to imperialist domination, to tyranny**.” 62 Viewed from the perspective of Levinas’ critique of the Occidental ontological tradition, such a conclusion is to be expected. For Levinas, Heideggerian Being represents merely the latest arche utilized by Western ontologists to eliminate the alterity of the Other and promote the freedom of the self. As the political manifestation of the totalization of the Other that ontology perpetrates in the realm of thought, **tyranny represents the diluted essence of ontological politics**. Much as ontological thought facilitates the domination of the other person by the autonomous ego, so too does it enable the state to totalize its “Other”– its subjects – in a comparatively comprehensive manner: “For the philosophical tradition the conflicts between the same and the other are resolved by theory whereby the other is reduced to the same – or, concretely, by the community of the state where by anonymous power, though it be intelligible, the I rediscovers war in the tyrannic oppression it undergoes from the totality.” 63 In this light, the tyrannical rule of the modern state extends into the political realm the violent, thematizing tendencies that characterize ontology generally. Nor is this conclusion shocking in light of the anti-humanistic cast of Heidegger’s thought. In the nineteenth and twentieth centuries, anti-humanistic thinkers often posited grandiose schemes designed to put an end to the alienation supposedly engendered by subjective humanism. Much like earlier theoretical anti-humanists such as Marx and Nietzsche, Heidegger accuses past humanisms of contributing to modern estrangement by overlooking a pivotal aspect of the human condition. 64 A key difference between Heidegger and his anti-humanistic forebears lies in the fact that, for him, it is metaphysical inquiry into the Being of beings that engenders modern alienation rather than philosophical idealism or slave-morality. Nonetheless, the comparison remains instructive: like Marx, Heidegger anticipates a future historical epoch in which man will finally recover his original ontological unity free from the obfuscating effect of past philosophical distortions. And like Marx and Nietzsche, Heidegger provides an ample supply of metaphysical pathos that **unwittingly complements the violent political objectives of totalitarian political movements**. In this sense, Heidegger’s rectorship merely repeats the Marxist tragedy as farce.

#### And, voting neg links to their argument – it’s an instance of calc thought

**Buckley 89** (last referenced date) **–** McGill University(R. Phillip, “Rationality and Responsibility in Heidegger’s and Husserl’s View of Technology,” <http://ulla.mcgill.ca/arts150/arts150r3.htm>) Jacome

At the root of Heidegger's understanding of technology is the fundamental distinction between "calculative" thought (rechnendes Denken)and "contemplative" thought (besinnliches Denken).1 The word "calculative" is connected to a type of thinking which finds its most powerful expression in modern science and which is motivated by measurement, by the search for results. "Calculative" also connotes how this thinking aims to manipulate and control. Just as a "calculating person" is someone who seeks to gain advantage, so too the thinking of science aims not just to observe a situation, but to make predictions, to plan for the future, to quantify in the sense of "taking stock" and thereby to keep everything in order. This thinking betrays for Heidegger a fundamental need for certainty and security: it wants to know exactly where "things"are and precisely what "they" might be doing.2 "Contemplative" thought, to the contrary, seeks neither to measure nor to control things, but to uncover their meaning (Sinn), above all, to question the meaning of things. It is a thinking which is fundamental and it is linked to Heidegger's vision of authentic philosophy. Though Heidegger is far from consistent with his terminology, contemplative thinking as authentic philosophy is often just called "thought" in his later works, and the word "philosophy" itself is frequently reserved for the philosophical tradition. Thus "thought" is at times severely contrasted with "philosophy" - that is, with the philosophy of the tradition. The link between the philosophy of the tradition and the calculative thought of modern science is made through the introduction of yet another type of thinking: "representational thinking" (vorstellendesDenken). This thinking takes the world as something that can be "placed before" (vor-gestellt) the subject, just as one places a picture before oneself and hence representational thought treats the world or reality itself as if it were a picture (Bild). For Heidegger, the appearance of the"subject" and the world becoming a "picture" are two "interwoven events" which mark the beginning of the modern age dominated by science, the age of the "world-picture."3 The calculative thinking which characterizes modern science is itself only possible on the basis of having a subject that can calculate and a "world" which is "placed before" it, a world that is easily manipulated, controlled and contained. For Heidegger, there would be no science without philosophy and its representational thinking.4 What does this "opposition" between calculative and contemplative thinking amount to? First, it is crucial to note that the thinking which Heidegger describes as taking place in science is not a "lesser" form that could be "upgraded" to a contemplative form of thought. The calculative thought of science is constitutionally incapable of being contemplative thought, and hence Heidegger's oft-quoted assentation that "science does not think."5 Certainly scientists can reflect on their own field, on its methods, procedures and so forth. But this sort of self-interrogation aimed at improvement is part of calculative thinking in the first place. Calculative thought turned in on itself remains calculative thought. This implies a "distance" between the calculative and contemplative forms of thought, or an unbridgeable "gap" (Kl~lft).6 The difference between these two types of thinking is one of kind and not degree. This "gap" does not mean that calculative thought is somehow "bad,"or that contemplative thinking is "better**." To judge contemplative thought as superior to calculative thought is to think calculatively**, and hence cannot be the task of authentic philosophy. Neither is Heidegger claiming that the nature of modern science as calculative is to be viewed as negative. It is the good "fortune" of science that it cannot "think" in the contemplative, deliberative or recollective sense.7 The problem, it seems, occurs when calculative thought pushes aside other forms of thinking. Heidegger wants to undermine the exclusivity of calculative thinking without denigrating it. He desires to open a space for other forms of thinking. A first step away from the domination of calculative thinking consists in uncovering the presuppositions which underlie it, in seeing that calculation is not the only possibility of human "thought." It may well be that the realm of contemplative thought can only be approached by means of this method which ultimately might be characterized as avia negative. Nonetheless, the description of calculative thought and its representational character does tell us something about the nature of contemplative thought. Contemplative thought is extremely difficult to attain because, by its very nature, it cannot be "attained." To want to have a contemplative style of thought is to remain in the clutch of the basically possessive calculative style of thinking.8 Contemplative thought is hence marked by a fundamental "passivity,"9 it consists of a certain "letting-go" of all "attitudes," of any "picturing" of the world. Put in terms which are even more expressive of passivity, contemplative thought is a "releasement" from the dominating style of calculative thought. Both "letting-go" and "releasement" are plausible translations of Heidegger's basic characterization of contemplative thought as Gelassenheit.

## 1ar

### 1ar prolif

#### Proliferation will be rapid and escalate – kills stability – multiple reasons.

**Horowitz, 2009**

[April, Michael, Department of Political Science, University of Pennsylvania, Philadelphia, “The Spread of Nuclear Weapons,” journal of conflict resolution, vol 53, no 2]

Learning as states gain experience with nuclear weapons is complicated. While to some extent, nuclear acquisition might provide information about resolve or capabil-  ities, it also generates uncertainty about the way an actual conflict would go—given  the new risk of nuclear escalation—and uncertainty about relative capabilities. Rapid proliferation may especially heighten uncertainty given the potential for reasonable  states to disagree at times about the quality of the capabilities each possesses.2 What  follows is an attempt to describe the implications of inexperience and incomplete  information on the behavior of nuclear states and their potential opponents over time.  Since it is impossible to detail all possible lines of argumentation and possible  responses, the following discussion is necessarily incomplete. This is a first step.  The acquisition of nuclear weapons increases the confidence of adopters in their  ability to impose costs in the case of a conflict and the expectations of likely costs if  war occurs by potential opponents. The key questions are whether nuclear states  learn over time about how to leverage nuclear weapons and the implications of that  learning, along with whether actions by nuclear states, over time, convey information  that leads to changes in the expectations of their behavior—shifts in uncertainty—  on the part of potential adversaries.  Learning to Leverage?  When a new state acquires nuclear weapons, how does it influence the way the  state behaves and how might that change over time? Although nuclear acquisition  might be orthogonal to a particular dispute, it might be related to a particular secu-  rity challenge, might signal revisionist aims with regard to an enduring dispute, or  might signal the desire to reinforce the status quo.  This section focuses on how acquiring nuclear weapons influences both the new  nuclear state and potential adversaries. In theory, system wide perceptions of nuclear  danger could allow new nuclear states to partially skip the early Cold War learning  process concerning the risks of nuclear war and enter a proliferated world more cog-  nizant of nuclear brinksmanship and bargaining than their predecessors. However,  each new nuclear state has to resolve its own particular civil–military issues surrounding operational control and plan its national strategy in light of its new capa-  bilities. Empirical research by Sagan (1993), Feaver (1992), and Blair (1993)  suggests that viewing the behavior of other states does not create the necessary tacit  knowledge; there is no substitute for experience when it comes to handling a nuclear  arsenal, even if experience itself cannot totally prevent accidents. Sagan contends  that civil–military instability in many likely new proliferators and pressures generated by the requirements to handle the responsibility of dealing with nuclear weapons  will skew decision making toward more offensive strategies (Sagan 1995). The ques-  tions surrounding Pakistan’s nuclear command and control suggest there is no magic  bullet when it comes to new nuclear powers’ making control and delegation decisions (Bowen and Wolvén 1999).  Sagan and others focus on inexperience on the part of new nuclear states as a key  behavioral driver. Inexperienced operators and the bureaucratic desire to “justify”  the costs spent developing nuclear weapons, combined with organizational biases

that may favor escalation to avoid decapitation—the “use it or lose it” mind-set—  may cause new nuclear states to adopt riskier launch postures, such as launch on  warning, or at least be perceived that way by other states (Blair 1993; Feaver 1992;  Sagan 1995).3  Acquiring nuclear weapons could alter state preferences and make states more  likely to escalate disputes once they start, given their new capabilities.4 But their  general lack of experience at leveraging their nuclear arsenal and effectively communicating nuclear threats could mean new nuclear states will be more likely to  select adversaries poorly and to find themselves in disputes with resolved adver-  saries that will reciprocate militarized challenges. The “nuclear experience” logic also suggests that more experienced nuclear states  should gain knowledge over time from nuclearized interactions that helps leaders  effectively identify the situations in which their nuclear arsenals are likely to make  a difference. Experienced nuclear states learn to select into cases in which their com-  parative advantage, nuclear weapons, is more likely to be effective, increasing the  probability that an adversary will not reciprocate.  Coming from a slightly different perspective, uncertainty about the consequences  of proliferation on the balance of power and the behavior of new nuclear states on  the part of their potential adversaries could also shape behavior in similar ways (Schelling 1966; Blainey 1988). While a stable and credible nuclear arsenal communicates clear information about the likely costs of conflict, in the short term,  nuclear proliferation is likely to increase uncertainty about the trajectory of a war,  the balance of power, and the preferences of the adopter.

#### Prolif is uneven – small arsenals don’t solve

Narang, 12 [VIPIN NARANG is an Assistant Professor of Political Science at MIT and member of MIT's Security Studies Program. He received his Ph.D. from the Department Journal of Conflict Resolution July 9, 2012 0022002712448909, p. sage Journals]

Conclusion¶ These findings have important implications for our understanding of nuclear deterrence and nuclear proliferation. First, they **overturn a** central **belief** in international relations and nuclear deterrence theory that the acquisition of even a minimal nuclear capability radically **improves a** regional **state's ability to deter** conventional conflict. The Cold War experience left it unclear as to what it precisely takes to deter conflict. The regional nuclear powers, however, which have had to face constrained decisions about how to allocate their deterrent power, illustrate that states must explicitly orient their nuclear forces to deter conventional conflict in order to expe- rience reduced attacks. The mere possession of nuclear weapons or even second- strike forces alone seems incapable of providing systematic deterrence against con- ventional attacks. There is no magical deterrent benefit against conventional conflict generated by existential, catalytic, or assured retaliatory postures.¶ To reap a significant deterrent effect against conventional conflict, regional states must—for better or worse—explicitly orient their nuclear forces to do so by adopting an asymmetric escalation posture. This posture undoubtedly carries with it other sig- nificant risks, such as severe command and control pressures and an attendant increase in the risk of inadvertent nuclear use (Sagan

1995). Furthermore, states with this posture have **strong incentives to undermine the** so-called **nuclear taboo** in order to keep their nuclear threats credible and may do so in ways that risk their own, or international, security (Tannenwald 2008). However, the findings in this article pro- vide a strong clue as to why states may be willing to run these risks: the significant deterrence benefit that this posture provides. All of this suggests that, theoretically, scholars should cease treating nuclear weapons states as equivalent. The fact that nuclear powers have adopted widely varying nuclear postures that have radically dif- ferent effects on international conflict calls for a revision to our thinking about how conflict can be deterred with nuclear weapons. ror policy makers, these findings suggest that, in addition to addressing a state s initial march toward nuclear weapons, more attention ought to be paid to how regional states operationalize their nuclear forces once they cross the threshold. If it is nuclear posture, not simply nuclear possession, that generates the patterns of regional conflict around a particular regional nuclear power, practitioners may need to reassess their expectations of the frequency and character of conflict in regions with nuclear powers. It also means that the march toward nuclearization, while important, is not the only process that can be targeted by nonproliferation efforts. Even after a regional power has obtained nuclear weapons, the international commu- nity may be able to shape a state's choice of posture. For example, the perceived availability of the United States as a patron state is critical to the selection of the cat- alytic posture. In other instances, there might also be good reasons and ways to push a regional power that is tempted to adopt an asymmetric escalation posture to adopt an assured retaliation posture instead, and minimize the emphasis it places on nuclear weapons for its day-to-day conventional defense (Sechser and Fuhrmann, n.d.).¶ The fundamental point is that nuclear postures matter. Nuclear weapons may deter, **but they deter** unequally**.** Moreover, both theoretically and empirically, it seems to take more to deter conventional conflict than is generally appreciated. This finding ought to influence how we think about the emerging nuclear landscape and about what it means for international conflict.¶

### 1ar a2 solvency

#### Plan key to beat out natural gas

Lamonica 12 [Tech Review Writer 20 years of experience covering technology and business. Martin, A Glut of Natural Gas Leaves Nuclear Power Stalled, [www.technologyreview.com/news/428737/a-glut-of-natural-gas-leaves-nuclear-power/](http://www.technologyreview.com/news/428737/a-glut-of-natural-gas-leaves-nuclear-power/)]

The nuclear renaissance is in danger of petering out before it has even begun, but not for the reasons most people once thought. Forget safety concerns, or the problem of where to store nuclear waste—the issue is simply cheap, abundant natural gas. General Electric CEO Jeffrey Immelt caused a stir last month when he told the Financial Times that it's "hard to justify nuclear" in light of low natural gas prices. Since GE sells all manner of power generation equipment, including components for nuclear plants, Immelt's comments hold a lot of weight. Cheap natural gas has become the fuel of choice with electric utilities, making building expensive new nuclear plants an increasingly tough sell. The United States is awash in natural gas largely thanks to horizontal drilling and hydraulic fracturing, or "fracking" technology, which allows drillers to extract gas from shale deposits once considered too difficult to reach. In 2008, gas prices were approaching $13 per million BTUs; prices have now dropped to around $3. When gas prices were climbing, there were about 30 nuclear plant projects in various stages of planning in the United States. Now the Nuclear Energy Institute estimates that, at most, five plants will be built by 2020, and those will only be built thanks to favorable financing terms and the ability to pay for construction from consumers' current utility bills. Two reactors now under construction in Georgia, for example, moved ahead with the aid of an $8.33 billion loan guarantee from the U.S. Department of Energy. What happens after those planned projects is hard to predict. "The question is whether we'll see any new nuclear," says Revis James, the director of generation research and development at the Electric Power Research Institute. "The prospects are not good." Outside the United States, it's a different story. Unconventional sources of natural gas also threaten the expansion of nuclear, although the potential impact is less clear-cut. Around the world, there are 70 plants now under construction, but shale gas also looms as a key factor in planning for the future. Prices for natural gas are already higher in Asia and Europe, and shale gas resources are not as fully developed as they are the United States. Some countries are also blocking the development of new natural gas resources. France, for instance, which has a strong commitment to nuclear, has banned fracking in shale gas exploration because of concerns over the environmental impact. Fast-growing China, meanwhile, needs all the energy sources available and is building nuclear power plants as fast as possible. Even in United States, of course, super cheap natural gas will not last forever. With supply exceeding demand, some drillers are said to be losing money on natural gas, which could push prices back up. Prices will also be pushed upward by utilities, as they come to rely on more natural gas for power generation, says James. Ali Azad, the chief business development officer at energy company Babcock & Wilcox, thinks the answer is making nuclear power smaller, cheaper, and faster. His is one of a handful of companies developing small modular reactors that can be built in three years, rather than 10 or more, for a fraction of the cost of gigawatt-size reactors. Although this technology is not yet commercially proven, the company has a customer in the Tennessee Valley Authority, which expects to have its first unit online in 2021 (see "A Preassembled Nuclear Reactor"). "When we arrive, we will have a level cost of energy on the grid, which competes favorably with a brand-new combined-cycle natural gas plants when gas prices are between $6 to $8," said Azad. He sees strong demand in power-hungry China and places such as Saudia Arabia, where power is needed for desalination. Even if natural gas remains cheaper, utilities don't want to find themselves with an overreliance on gas, which has been volatile on price in the past, so nuclear power will still contribute to the energy mix. "[Utilities] still continue [with nuclear] but with a lower level of enthusiasm—it's a hedging strategy," says Hans-Holger Rogner from the Planning and Economics Studies section of the International Atomic Energy Agency. "They don't want to pull all their eggs in one basket because of the new kid on the block called shale gas."

#### No defaults or taxpayer risk -- loan guarantees are a key source of federal revenue.

Bowman, ‘6

[Frank, President and CEO -- Nuclear Energy Institute, Speech to House of Representatives, Subcommittee on Energy and Water Development, 9-3, http://nei.org/newsandevents/speechesandtestimony/2006/bowmantestimony91306extended]

It is important to note that the loan guarantee program is not a subsidy. Under the terms of the statute, the project developer would pay the credit subsidy cost of the loan guarantee, pursuant to Federal Credit Reform Act protocols. Given a rational approach to implementation, in which projects are selected based on a high likelihood of commercial success with the loan guarantees, there will be trivial risk to the taxpayer and minimal risk of default. The loan guarantee program is a financing tool, modeled on the successful financing techniques already employed by the federal government (through such agencies as the Export-Import Bank and the Overseas Private Investment Corp.). It is designed to stimulate investment in high-capital-cost projects that are in the national interest, and to correct the market imperfections described above that would otherwise preclude those investments. Properly managed and implemented, this program represents a source of revenue to the federal government in the years ahead, in the form of investment banking fees.

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### 1ar a2 disad (1)

#### Forests resilient

**Budiansky 93** – Atlantic Monthly correspondent (Stephen, 12/5, The Doomsday Myths, http://www.usnews.com/usnews/culture/articles/931213/archive\_016280\_print.htm)

Similarly, the Atlantic coastal forests of Brazil have been cut to about 12 percent of their original size, yet a team of Brazilian zoologists that combed the forests recently could not confirm a single case of extinction. Instead, they rediscovered several birds and six species of butterfly considered extinct 20 years ago. And a survey by the Flora Meso-Americana project found increased abundance of some species considered threatened. "Despite extensive inquiries, we have been unable to obtain conclusive evidence to support the suggestion that massive extinctions have taken place in recent times," writes Vernon Heywood, a former chief scientist of the International Union for the Conservation of Nature and Natural Resources, which works with governments to protect endangered species and habitats.

Natural resilience. Biologists offer several explanations for such "unreasonable" tenacity of species. Many tropical species are widely dispersed, so the loss of one chunk of a forest does not doom them to extin

ction. Moreover, ecosystems like the Brazilian Atlantic forests may be naturally resilient, having evolved mechanisms to cope with the severe natural upheavals that are endemic to a mountainous climate subject to heavy rains and sudden cold spells.

#### Impact hopelessly non-unique

Patrick **McGroarty** 1-23-20**12**; Covers South Africa and the region for The Wall Street Journal and Dow Jones Newswires. “Rising Nigeria's Violence Imperils Stability” http://online.wsj.com/article/SB10001424052970204624204577176902128726344.html

Nigeria's recent religious conflicts are occurring even as many Africans are experiencing broader economic pain. Violence has buffeted the Muslim-led nation of Sudan and mostly Christian and animist South Sudan, the world's newest independent state. Humanitarian agencies say that clashes since South Sudan asserted its independence have led more than 350,000 Sudanese to flee into the new country from the Khartoum-administrated north. Media reports say thousands have been killed there. There are also simmering disputes between the countries over oil revenue. Increased fighting in Somalia after an incursion by Kenya aimed at subduing Al-Shabaab militants has displaced tens of thousands of Somalis, disrupted the movement of goods and delayed planting of staple crops. Meanwhile inside Kenya, frequent security sweeps and strident rhetoric by Kenyan leaders about suspected Al-Shabaab militants in their midst has led to intense scrutiny of Somali immigrant communities like Eastleigh, a predominately Muslim enclave of Nairobi. The Islamic militant group has long used Kenya as a base, and strong ties exist between the armed group and Somali immigrants. A series of kidnappings and grenade attacks against Kenyan civilians since the invasion has heightened tensions. "The Kenyan intervention may itself sow seeds of radicalization if every Somali immigrant is accused of terrorism or if it attempts to create a Kenyan colony in Somalia," said Comfort Ero, the Africa Program director for the International Crisis Group in Nairobi. The recent clashes in Nigeria, as well as in Sudan and Somalia, also have spotlighted the risk of some of the more sophisticated militant groups joining forces. As the U.S. withdraws troops from Iraq and Afghanistan, security officials say the Horn of Africa is emerging as the next battleground in the fight against al Qaeda and its affiliates. In a Friday speech, U.S. Secretary of Defense Leon Panetta said al Qaeda no longer has the capability to stage a 9/11-style attack and that its leadership has been "decimated." "But we need to continue that pressure," he said. "We need to keep going after them wherever they go, whether it's Yemen or Somalia or North Africa." Ms. Ero, of International Crisis Group, said sectarian tensions have risen in the aftermath of the Arab Spring. Islamist groups in Egypt and Libya have come to the fore in the political and economic upheaval of those revolutions. As in the Middle East and North Africa, sub-Saharan African nations share the same volatile mix of booming youth populations, low employment, and decades of ineffectual governance.

### middle east

**Deterrence checks**

**Global Security Newswire 9/7**/11,“Israeli Defense Chief Dismisses Threat of Chemical Attack.”Wednesday, Sept. 7, 2011

There is no chance that Israel would face a chemical weapons strike from a hostile nation, Haaretz quoted Israeli Defense Minister Ehud Barak as saying on Tuesday (see [GSN](http://www.globalsecuritynewswire.org/gsn/nw_20100819_9876.php), Aug. 19, 2010).

"Our enemies wouldn't dare use chemical weapons against Israel, in the eventuality they have such (weapons), neither now nor in the future," Barak said.

Israeli Maj. Gen. Eyal Eisenberg had warned on Monday that the nation was on the verge of a full-scale military conflict with regional enemies that might consider bringing weapons of mass destruction to bear.

Longtime antagonist Syria is understood to possess large quantities of chemical warfare materials that could be dispersed by ballistic Scud missiles and other delivery systems. Syria's chemical arsenal is believed to be primarily aimed against Israel, which is widely assumed to possess nuclear weapons (see [GSN](http://www.globalsecuritynewswire.org/gsn/nw_20110906_2407.php), Sept. 6).

Israel's adversaries "know well why they shouldn't even think of using chemical weapons against Israel," Barak said ([Haaretz](http://www.haaretz.com/news/diplomacy-defense/israel-s-enemies-wouldn-t-dare-launch-chemical-attack-barak-says-1.382863), Sept. 6).

**No escalation**

**Lappin 9/27/11** “Arab Spring—or Islamist Winter?” Lappin is a journalist for the Jerusalem Post, where he covers police and national security affairs, and a Visiting Fellow at [JINSA](http://www.jinsa.org/), from where this article is adapted.

A third view also exists. According to its subscribers, Islamists may well take over the region, but they won’t launch a multi-front war against Israel.

This possibility was outlined in September by Col. (Ret.) Jonathan Fighel, who served in various military operational posts, as well as in the research division of the IDF Intelligence Corps. “These arguments exist in the defense community because we are at the evaluation stage. Nobody, including those at the top, really knows what will happen,” he said.

“I personally believe we are going towards an Islamist winter and not an Arab spring. The Islamist forces are, relatively speaking, the most stable and organized compared to the other political forces in the Arab world,” he added. “The Islamists materialize naturally in anarchic or non-democratic environments, and they will be the first to take control.”

But that does not mean the Middle East is on a path to war, he stressed. A more likely outcome would be an increase in guerrilla attacks on the army and terrorist attacks on civilians. “I wouldn’t call that situation a war,” he said. “But it would be a different ball game, and it would certainly create instability.“

**Not gonna happen and no impact – limited resources to exchange, and a huge trade-based disincentive to pissing off the US**

**Stratfor 1-13**-2012; Iran's Limitations in Latin America http://www.stratfor.com/analysis/irans-limitations-latin-america

Iranian President Mahmoud Ahmadinejad (R) and Cuban President Gen. Raul Castro in Havana on Jan. 11 Iranian President Mahmoud Ahmadinejad ended a weeklong tour of Latin America on Jan. 12. Tensions between the United States and Iran in Latin America surrounded the visit. While Iran's influence in the region poses some risks to the United States, those risks are limited by the lack of resources among Iran's Latin American partners and the fear of U.S. retribution. The main contest between Washington and Tehran will remain in the Middle East. Analysis Iranian President Mahmoud Ahmadinejad left Ecuador on Jan. 12 after a weeklong tour of Latin America, during which he also visited Venezuela, Cuba and Nicaragua. This was Ahmadinejad's fifth visit to the region, and it came amid elevated tensions between the United States and Iran in the wake of the U.S. withdrawal from Iraq. Although Ahmadinejad signed many cooperation agreements during his Latin American trip, the visits were largely geared toward garnering international attention. The ongoing covert war between the United States and Iran generally plays out in the Middle East. However, much like Russia, Iran sees utility in cultivating close relationships in Latin America to maintain involvement in a traditional U.S. sphere of influence. Iran has close diplomatic ties with many of the countries on the left end of Latin America's political spectrum, primarily because these countries' relations with the United States are strained. Washington's objections to Iran's influence in Latin America have grown in recent years, peaking with the October 2011 allegations that an Iranian agent intended to solicit a Mexican cartel to help assassinate the Saudi ambassador in Washington and more recent allegations that led the United States to expel a Venezuelan consul general. Despite these incidents and heightened tensions between Tehran and Washington, the United States has done little to keep Iran from cultivating relationships in the region. Though Iran's involvement in the region poses some risks to the United States, those risks are limited. Washington's response to Ahmadinejad's Latin America tour was muted, but the decision to expel Venezuelan Consul General in Miami Livia Acosta just days before the Iranian president arrived in Caracas highlighted the ongoing tensions between the United States and Iran and its Latin American partners. Acosta was declared persona non grata Jan. 9 based on accusations that she participated in a Cuban-Iranian plot that began in 2006 and was intended to conduct a cyberattack against key U.S. computer systems, including the White House, the National Security Administration, the CIA and nuclear power plants throughout the country. These allegations surfaced in the documentary "The Iranian Threat," which aired in early December 2011 on Mexican TV network Univision. The documentary showed video from meetings between Iranian, Cuban and Venezuelan diplomats attempting to hire Mexican information technology professors to conduct the attack. In the documentary, Acosta is said to have passed information related to the conspiracy to individuals close to Venezuelan President Hugo Chavez. The conspiracy was covertly recorded by a Mexican IT professor, who turned the evidence over to Mexican and U.S. authorities. Given the length of time the United States has known about Acosta's alleged participation in the conspiracy, the publication of the documentary likely pushed U.S. authorities to take action against her (and Ahmadinejad's visit provided a timely opportunity). Reports from the U.S. and Latin American media have accused Iran of acquiring significant amounts of uranium from Venezuela and sending Hezbollah agents to Latin America for training. Iran does use its relationship with Venezuela and other Latin American partners to establish financial ties and set up shell companies designed to evade sanctions. It is less clear, however, whether there is any basis to the rumors about uranium supplies and Hezbollah training -- and, if the rumors are true, how significant a threat they might pose to the United States. The rumors certainly contain elements of truth -- Venezuela is thought to have uranium deposits, though whether they are being exploited is unclear. However, while Hezbollah has a presence in the region associated with its drug smuggling and financial activities, there is no indication that its activities pose a critical threat to the United States. Whatever Iran's intentions in Latin America might be, the role the region can play in supporting Tehran is inherently limited. It is difficult to estimate trade levels, as Iran frequently uses shell companies, but official trade between Latin America and Iran is negligible. More to the point, the Latin American countries with which Iran has relationships have limited resources to offer Iran. Even though Venezuela admitted to sending two separate shipments of gasoline to Iran in 2010, it costs a great deal to send refined products to Iran, and the dilapidated state of Venezuela's refining sector has rendered the country barely able to keep up with its domestic gasoline demand. Neither Mexico nor Brazil -- the region's two countries with the largest industrial capacities -- is interested in a particularly close relationship with Iran, in part because such ties would endanger critical relationships with the United States and Europe. The threat of U.S. retaliation is the biggest constraint on Iran's relationships with Latin America. The close relationships the Soviet Union had in Latin America during the Cold War -- particularly with Cuba -- were based on the credible promise of significant military and economic support from Moscow. Iran has no such assurances to offer any Latin American states, which means there is little incentive for countries in the region to risk seriously breaching relations with the United States. Even Venezuela, whose relations with the United States are heated, still depends on oil exports to the United States. Any serious deterioration of relations between Caracas and Washington could lead to oil sanctions that would affect the export revenues crucial to Venezuela. While Iran's involvement in the region poses some inherent risks to the United States, there are also significant limiting factors to those risks. The foundation of U.S. influence in Latin America rests solidly on the status of the United States as the primary trading partner for most Latin American countries and the largest military in the region. Without a significant outside guarantor of financial and military support, Latin American states will only go so far to facilitate anti-U.S. activities in the region. High-profile Iranian visits to Latin America remain a sideshow to the very real competition between Washington and Tehran in the Middle East.

### central asia

#### No Kazak escalation

**Stratfor, 12** [1/18/12, “Annual Forecast 2012”, global intelligence company, http://www.stratfor.com/forecast/annual-forecast-2012]

**Numerous factors** will undermine Central Asia's stability in 2012, but they **will not lead to a major breaking point** in the region this year. Protests over deteriorating economic conditions will occur throughout the region, particularly in Kazakhstan, though these will be contained to the region and will not result in overly disruptive violence. Serious issues in Kazakhstan's banking sector could lead to a financial crisis, though the government will be able to manage the difficulties and contain it during 2012 by using the oil revenues it has saved up.

#### Great powers don’t want to antagonize each other—checks outside escalation

**Kucera 10**—regular contributor to U.S. News and World Report, Slate and EurasiaNet. (Joshua, Central Asia Security Vacuum, 16 June 2010, <http://the-diplomat.com/2010/06/16/central-asia%E2%80%99s-security-vacuum/>)

Note – CSTO = Collective Security Treaty Organization

Yet when brutal violence broke out in one of the CSTO member countries, Kyrgyzstan, just days later, the group didn’t respond rapidly at all. Kyrgyzstan’s interim president, Roza Otunbayeva, even asked Russia to intervene, but Russian President Dmitry Medvedev responded that Russians would only do so under the auspices of the CSTO. And nearly a week after the start of the violence—which some estimate has killed more than 1000 people and threatens to tear the country apart—the CSTO has still not gotten involved, but says it is ‘considering’ intervening. ‘We did not rule out the use of any means which are in the CSTO’s potential, and the use of which is possible regardless of the development of the situation in Kyrgyzstan,’ Russian National Security Chief Nikolai Patrushev said Monday. On June 10-11, another regional security group, the Shanghai Cooperation Organisation, held its annual summit in Tashkent, Uzbekistan. The SCO has similar collective security aims as the CSTO, and includes Russia, China and most of the Central Asian republics, including Kyrgyzstan. But despite the violence that was going on even as the SCO countries’ presidents met in Uzbekistan, that group also didn’t involve itself in the conflict, and made only a tepid statement calling for calm. Civil society groups in Kyrgyzstan and Uzbekistan (much of the violence is directed toward ethnic Uzbeks in Kyrgyzstan, and the centre of the violence, the city of Osh, is right on the border of Uzbekistan) called on the United Nations to intervene. And Otunbayeva said she didn’t ask the US for help. Even Uzbekistan, which many in Kyrgyzstan and elsewhere feared might try to intervene on behalf of ethnic Uzbeks, has instead opted to stay out of the fray, and issued a statement blaming outsiders for ‘provoking’ the brutal violence. The violence has exposed a security vacuum in Central Asia that no one appears interested in filling. In spite of all of the armchair geopoliticians who have declared that a ‘new Great Game’ is on in Central Asia, the **major powers seem** distinctly **reluctant to expand their spheres of influence there**. Why? It’s possible that, amid a tentative US-Russia rapprochement and an apparent pro-Western turn in Russian foreign policy, **neither side wants to antagonize** the other. The United States, obviously, also is overextended in Iraq and Afghanistan and has little interest in getting in the middle of an ethnic conflict in Kyrgyzstan. It’s possible that the CSTO Rapid Reaction Force isn’t ready for a serious intervention as would be required in Kyrgyzstan. (It’s also possible that Russia’s reluctance is merely a demure gesture to ensure that they don’t seem too eager to get involved; only time will tell.)

# r5 neg v. emporia cw

### 1nc cards

#### Specific, limited resolutions exist to ensure mutual ground which is key to sustainable controversy without sacrificing creativity or openness

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Debate is a means of settling differences, so there must be a difference of opinion or a conflict of interest before there can be a debate. If everyone is in agreement on a tact or value or policy, there is no need for debate: the matter can be settled by unanimous consent. Thus, for example, it would be pointless to attempt to debate "Resolved: That two plus two equals four," because there is simply no controversy about this statement. (Controversy is an essential prerequisite of debate. Where there is no clash of ideas, proposals, interests, or expressed positions on issues, there is no debate. In addition, debate cannot produce effective decisions without clear identification of a question or questions to be answered. For example, general argument may occur about the **broad topic** of illegal immigration. How many illegal immigrants are in the United States? What is the impact of illegal immigration and immigrants on our economy? What is their impact on our communities? Do they commit crimes? Do they take jobs from American workers? Do they pay taxes? Do they require social services? Is it a problem that some do not speak English? Is it the responsibility of employers to discourage illegal immigration by not hiring undocumented workers? Should they have the opportunity- to gain citizenship? Docs illegal immigration pose a security threat to our country? Do illegal immigrants do work that American workers are unwilling to do? Are their rights as workers and as human beings at risk due to their status? Are they abused by employers, law enforcement, housing, and businesses? I low are their families impacted by their status? What is the moral and philosophical obligation of a nation state to maintain its borders? Should we build a wall on the Mexican border, establish a national identification can!, or enforce existing laws against employers? Should we invite immigrants to become U.S. citizens? Surely you can think of many more concerns to be addressed by a conversation about the topic area of illegal immigration. Participation in this "debate" is likely to be emotional and intense. However, it is not likely to be productive or useful without focus on a particular question and identification of a line demarcating sides in the controversy. To be discussed and resolved effectively, controversies must be stated clearly. **Vague understanding** results in unfocused deliberation and poor decisions, frustration, and emotional distress, as evidenced by the failure of the United States Congress to make progress on the immigration debate during the summer of 2007.

Someone disturbed by the problem of the growing underclass of poorly educated, socially disenfranchised youths might observe, "Public schools are doing a terrible job! They are overcrowded, and many teachers are poorly qualified in their subject areas. Even the best teachers can do little more than struggle to maintain order in their classrooms." That same concerned citizen, facing a complex range of issues, might arrive at an unhelpful decision, such as "We ought to do something about this" or. worse. "It's too complicated a problem to deal with." Groups of concerned citizens worried about the state of public education could join together to express their frustrations, anger, disillusionment, and emotions regarding the schools, but without a focus for their discussions, they could easily agree about the sorry state of education **without** finding points of clarity or potential solutions. A gripe session would follow. But if a precise question is posed—such as "What can be done to improve public education?"—then a more profitable area of discussion is opened up simply by placing a focus on the search for a concrete solution step. One or more judgments can be phrased in the form of debate propositions, motions for parliamentary debate, or bills for legislative assemblies. The statements "Resolved: That the federal government should implement a program of charter schools in at-risk communities" and "Resolved: That the state of Florida should adopt a school voucher program" more clearly identify specific ways of dealing with educational problems in a manageable form, suitable for debate. They provide specific policies to be investigated and aid discussants in identifying points of difference.

To have a productive debate, which facilitates effective decision making by directing and placing limits on the decision to be made, the basis for argument should be clearly defined. If we merely talk about "homelessness" or "abortion" or "crime'\* or "global warming" we are likely to have an interesting discussion but not to establish profitable basis for argument. For example, the statement "Resolved: That the pen is mightier than the sword" is debatable, yet fails to provide much basis for clear argumentation. If we take this statement to mean that the written word is more effective than physical force for some purposes, we can identify a problem area: the comparative effectiveness of writing or physical force for a specific purpose.

Although we now have a general subject, we have not yet stated a problem. It is still too broad, too loosely worded to promote well-organized argument. What sort of writing are we concerned with—poems, novels, government documents, website development, advertising, or what? What does "effectiveness" mean in this context? What kind of physical force is being compared—fists, dueling swords, bazookas, nuclear weapons, or what? A more specific question might be. "Would a mutual defense treaty or a visit by our fleet be more effective in assuring Liurania of our support in a certain crisis?" The basis for argument could be phrased in a debate proposition such as "Resolved: That the United States should enter into a mutual defense treatv with Laurania." Negative advocates might oppose this proposition by arguing that fleet maneuvers would be a better solution. This is not to say that debates should completely avoid creative interpretation of the controversy by advocates, or that good debates cannot occur over competing interpretations of the controversy; in fact, these sorts of debates may be very engaging. The point is that debate is best facilitated by the guidance provided by **focus on a particular point of difference**, which will be outlined in the following discussion.

#### Energy production is a term of art—it doesn’t mean burning something for power but rather the process of resource recovery

Tom **Noyes** (works in health care finance in the Wilmington area. He has worked in city government, led two non-profit organizations, directed communications for four political campaigns and earned an MBA in finance) December **2005** “Economics and the Environment, Part 1: What Happens When We Light a Fire” http://www.dailykos.com/story/2005/12/08/170460/--Economics-and-the-Environment-Part-1-What-Happens-When-We-Light-a-Fire

If we wish to be precise, we wouldn't use the phrase "energy production." Most of what we call "energy production" involves burning something. A ton of coal is an asset. Smoke coming out a smokestack is not an asset. **Setting fire to an asset is not production**. It can economically useful by keeping us warm or converting iron ore to steel, but it is not, strictly speaking, production, defined as the creation of an asset. This simple rephrasing of what happens when we light a fire leads to useful insights into economics and the environment. Consider the similar phrase, "timber production." A tree standing in a forest may not be considered to have any economic value. But when a logger cuts down the tree, it becomes an asset as soon as it hits the ground and is hauled off to the lumber mill. Understanding that it is a fallacy to say that an asset can be created when something is destroyed suggests that we need to **look more closely** at the assumptions underlying the way we think about economics and the environment.

#### Deliberation requires a predetermined subject—they over-determine the rez more than us by positing debates as the ultimate arbiter of its value as opposed to a means to facilitate clash

Adolf G. **Gundersen,** Associate Professor of Political Science, Texas A&M, **2000**

POLITICAL THEORY AND PARTISAN POLITICS, 2000, p. 104-5. (DRGNS/E625)

Indirect political engagement is perhaps the single most important element of the strategy I am recommending here. It is also the most emblematic, as it results from a fusion of confrontation and separation. But what kind of political engagement might conceivably qualify as being both confrontational and separated from actual political decision-making? There is only one type, so far as I can see, and that is deliberation. Political deliberation is by definition a form of engagement with the collectivity of which one is a member. This is all the more true when two or more citizens deliberate together. Yet deliberation is also a form of political action that **precedes the actual** taking and **implementation** of decisions. It is thus simultaneously connected and disconnected, confrontational and separate. It is, in other words, a form of indirect political engagement. This conclusion, namely, that we ought to call upon deliberation to counter partisanship and thus clear the way for deliberation, looks rather circular at first glance. And, semantically at least, it certainly is. Yet this ought not to concern us very much. Politics, after all, is not a matter of avoiding semantic inconveniences, but of doing the right thing and getting desirable results. In political theory, therefore, the real concern is always whether a circular argument translates into a self-defeating prescription. And here that is plainly not the case, for what I am suggesting is that deliberation can diminish partisanship, which will in turn contribute to conditions amenable to continued or extended deliberation. That "deliberation promotes deliberation" is surely a circular claim, but it is just as surely an accurate description of the real world of lived politics, as observers as far back as Thucydides have documented. It may well be that deliberation rests on certain preconditions. I am not arguing that there is no such thing as a deliberative "first cause." Indeed, it seems obvious to me both that deliberators **require something to deliberate about and that** deliberation **presumes certain institutional structures** and shared values. Clearly something must get the deliberative ball rolling and, to keep it rolling, the cultural terrain must be free of deep chasms and sinkholes. Nevertheless, however extensive and demanding deliberation's preconditions might be, we ought not to lose sight of the fact that, once begun, deliberation tends to be self-sustaining. Just as partisanship begets partisanship, deliberation begets deliberation. If that is so, the question of limiting partisanship and stimulating deliberation are to an important extent the same question.

#### Topical fairness requirements are key to effective dialogue—monopolizing strategy and prep makes the discussion one-sided and subverts meaningful neg role

**Galloway 7** – professor of communications at Samford University (Ryan, “Dinner And Conversation At The Argumentative Table: Reconceptualizing Debate As An Argumentative Dialogue”, Contemporary Argumentation and Debate, Vol. 28 (2007), ebsco)

Debate as a dialogue sets an argumentative table, where all parties receive a relatively fair opportunity to voice their position. Anything that fails to allow participants to have their position articulated denies one side of the argumentative table a fair hearing. The affirmative side is set by the topic and fairness requirements. While affirmative teams have recently resisted affirming the topic, in fact, the topic selection process is rigorous, taking the relative ground of each topic as its central point of departure.¶ Setting the affirmative reciprocally sets the negative. The negative crafts approaches to the topic consistent with affirmative demands. The negative crafts disadvantages, counter-plans, and critical arguments premised on the arguments that the topic allows for the affirmative team. According to fairness norms, each side sits at a relatively balanced argumentative table.¶ When one side takes more than its share, competitive equity suffers. However, it also undermines the respect due to the other involved in the dialogue. When one side excludes the other, it fundamentally denies the personhood of the other participant (Ehninger, 1970, p. 110). A pedagogy of debate as dialogue takes this respect as a fundamental component. A desire to be fair is a fundamental condition of a dialogue that takes the form of a demand for equality of voice. **Far from** being **a banal request for links** to a disadvantage, fairness is a demand for respect, a demand to be heard, a demand that a voice backed by literally months upon **months of preparation**, research, and critical thinking not be silenced.¶ Affirmative cases that suspend basic fairness norms **operate to exclude** particular negative strategies. Unprepared, one side comes to the argumentative table unable to meaningfully participate in a dialogue. They are unable to “understand what ‘went on…’” and are left to the whims of time and power (Farrell, 1985, p. 114). Hugh Duncan furthers this line of reasoning:¶ Opponents not only tolerate but honor and respect each other because in doing so they enhance their own chances of thinking better and reaching sound decisions. Opposition is necessary because it sharpens thought in action. We assume that argument, discussion, and talk, among free an informed people who subordinate decisions of any kind, because it is only through such discussion that we reach agreement which binds us to a common cause…If we are to be equal…relationships among equals must find expression in many formal and informal institutions (Duncan, 1993, p. 196-197).¶ **Debate compensates for the exigencies of the world by offering a framework that maintains equality for the sake of the conversation** (Farrell, 1985, p. 114).¶ For example, an affirmative case on the 2007-2008 college topic might defend neither state nor international action in the Middle East, and yet claim to be germane to the topic in some way. The case essentially denies the arguments that state action is oppressive or that actions in the international arena are philosophically or pragmatically suspect. Instead of allowing for the dialogue to be modified by the interchange of the affirmative case and the negative response, the affirmative subverts any meaningful role to the negative team, preventing them from offering effective “counter-word” and undermining the value of a meaningful exchange of speech acts. **Germaneness and other substitutes for topical action do not accrue the dialogical benefits** of topical advocacy.

#### The information phase is key—in-round discussions themselves have limited potential, but limited topics foster pre-discursive prep which on balance is better for mindset change

**Goodin and Niemeyer 2003** – \*philosophy professor at Australian National University, editor of Oxford Handbooks of Political Science, founding editor of Blackwell's Journal of Political Philosophy, \*\*ANU political science research fellow (Robert and Simon, Political Studies, 51:627–649, “When Does Deliberation Begin? Internal Reflection versus Public Discussion in Deliberative Democracy”, http://onlinelibrary.wiley.com/doi/10.1111/j.0032-3217.2003.00450.x/pdf)

What happened in this particular case, as in any particular case, was in some respects peculiar unto itself. The problem of the Bloomfield Track had been well known and much discussed in the local community for a long time. Exaggerated claims and counter-claims had become entrenched, and unreflective public opinion polarized around them. In this circumstance, the effect of the information phase of deliberative processes was to brush away those highly polarized attitudes, dispel the myths and symbolic posturing on both sides that had come to dominate the debate, and liberate people to act upon their attitudes toward the protection of rainforest itself. The key point, from the perspective of ‘democratic deliberation within’, is that that happened in the earlier stages of deliberation – **before** the **formal discussions** (‘deliberations’, in the discursive sense) of the jury process ever began. The simple process of jurors seeing the site for themselves, focusing their minds on the issues and listening to what experts had to say did virtually all the work in changing jurors’ attitudes. **Talking among themselves**, as a jury, **did** very **little** of it. However, the same might happen in cases very different from this one. Suppose that instead of highly polarized symbolic attitudes, what we have at the outset is mass ignorance or mass apathy or non-attitudes. There again, people's engaging with the issue – focusing on it, **acquiring information** about it, thinking hard about it – would be something that is likely to **occur earlier** rather than later in the deliberative process. And more to our point, it is something that is most likely to occur within individuals themselves or in informal interactions, well in advance of any formal, organized group discussion. There is much in the large literature on attitudes and the mechanisms by which they change to support that speculation.31 Consider, for example, the literature on ‘central’ versus ‘peripheral’ routes to the formation of attitudes. Before deliberation, individuals may not have given the issue much thought or bothered to engage in an extensive process of reflection.32 In such cases, positions may be arrived at via peripheral routes, taking cognitive shortcuts or arriving at ‘top of the head’ conclusions or even simply following the lead of others believed to hold similar attitudes or values (Lupia, 1994). These shorthand approaches involve the use of available cues such as ‘expertness’ or ‘attractiveness’ (Petty and Cacioppo, 1986) – not deliberation in the internal-reflective sense we have described. Where peripheral shortcuts are employed, there may be inconsistencies in logic and the formation of positions, based on partial information or incomplete information processing. In contrast, ‘central’ routes to the development of attitudes involve the application of more deliberate effort to the matter at hand, in a way that is more akin to the internal-reflective deliberative ideal. Importantly for our thesis, there is nothing intrinsic to the ‘central’ route that requires group deliberation. Research in this area stresses instead the importance simply of ‘sufficient impetus’ for engaging in deliberation, such as when an individual is stimulated by personal involvement in the issue.33 The same is true of ‘on-line’ versus ‘memory-based’ processes of attitude change.34 The suggestion here is that we lead our ordinary lives largely on autopilot, doing routine things in routine ways without much thought or reflection. When we come across something ‘new’, we update our routines – our ‘running’ beliefs and procedures, attitudes and evaluations – accordingly. But having updated, we then drop the impetus for the update into deep-stored ‘memory’. A consequence of this procedure is that, when asked in the ordinary course of events ‘what we believe’ or ‘what attitude we take’ toward something, we easily retrieve what we think but we cannot so easily retrieve the reasons why. That more fully reasoned assessment – the sort of thing we have been calling internal-reflective deliberation – requires us to call up reasons from stored memory rather than just consulting our running on-line ‘summary judgments’. Crucially for our present discussion, once again, what prompts that shift from on-line to more deeply reflective deliberation is not necessarily interpersonal discussion. The impetus for fixing one's attention on a topic, and retrieving reasons from stored memory, might come from any of a number sources: group discussion is only one. And again, even in the context of a group discussion, this shift from ‘on-line’ to ‘memory-based’ processing is likely to occur earlier rather than later in the process, often before the formal discussion ever begins. All this is simply to say that, on a great many models and in a great many different sorts of settings, it seems likely that elements of the pre-discursive process are likely to prove crucial to the shaping and reshaping of people's attitudes in a citizens’ jury-style process. The **initial processes** of focusing attention **on a topic**, providing information about it and inviting people to think hard about it is likely to provide a strong impetus to internal-reflective deliberation, altering not just the information people have about the issue but also the way people process that information and hence (perhaps) what they think about the issue. What happens once people have shifted into this more internal-reflective mode is, obviously, an open question. Maybe people would then come to an easy consensus, as they did in their attitudes toward the Daintree rainforest.35 Or maybe people would come to divergent conclusions; and they then may (or may not) be open to argument and counter-argument, with talk actually changing minds. Our claim is not that group discussion will always matter as little as it did in our citizens’ jury.36 Our claim is instead merely that the earliest steps in the jury process – the sheer focusing of attention on the issue at hand and acquiring more information about it, and the internal-reflective deliberation that that prompts – will invariably matter more than deliberative democrats of a more discursive stripe would have us believe. However much or little difference formal group discussions might make, on any given occasion, the pre-discursive phases of the jury process will invariably have a considerable impact on changing the way jurors approach an issue. From Citizens’ Juries to Ordinary Mass Politics? In a citizens’ jury sort of setting, then, it seems that informal, pre-group deliberation –‘deliberation within’– will inevitably do much of the work that deliberative democrats ordinarily want to attribute to the more formal discursive processes. What are the preconditions for that happening? To what extent, in that sense, can findings about citizens’ juries be extended to other larger or less well-ordered deliberative settings? Even in citizens’ juries, deliberation will work only if people are attentive, open and willing to change their minds as appropriate. So, too, in mass politics. In citizens’ juries the need to participate (or the anticipation of participating) in formally organized group discussions might be the ‘prompt’ that evokes those attributes. But there might be many other possible ‘prompts’ that can be found in less formally structured mass-political settings. Here are a few ways citizens’ juries (and all cognate micro-deliberative processes)37 might be different from mass politics, and in which lessons drawn from that experience might not therefore carry over to ordinary politics: A citizens’ jury concentrates people's minds on a single issue. Ordinary politics involve many issues at once. A citizens’ jury is often supplied a background briefing that has been agreed by all stakeholders (Smith and Wales, 2000, p. 58). In ordinary mass politics, there is rarely any equivalent common ground on which debates are conducted. A citizens’ jury separates the process of acquiring information from that of discussing the issues. In ordinary mass politics, those processes are invariably intertwined. A citizens’ jury is provided with a set of experts. They can be questioned, debated or discounted. But there is a strictly limited set of ‘competing experts’ on the same subject. In ordinary mass politics, claims and sources of expertise often seem virtually limitless, allowing for much greater ‘selective perception’. Participating in something called a ‘citizens’ jury’ evokes certain very particular norms: norms concerning the ‘impartiality’ appropriate to jurors; norms concerning the ‘common good’ orientation appropriate to people in their capacity as citizens.38 There is a very different ethos at work in ordinary mass politics, which are typically driven by flagrantly partisan appeals to sectional interest (or utter disinterest and voter apathy). In a citizens’ jury, we think and listen in anticipation of the discussion phase, knowing that we soon will have to defend our views in a discursive setting where they will be probed intensively.39 In ordinary mass-political settings, there is no such incentive for paying attention. It is perfectly true that citizens’ juries are ‘special’ in all those ways. But if being special in all those ways makes for a better – more ‘reflective’, more ‘deliberative’– political process, then those are design features that we ought try to mimic as best we can in ordinary mass politics as well. There are various ways that that might be done. Briefing books might be prepared by sponsors of American presidential debates (the League of Women Voters, and such like) in consultation with the stakeholders involved. Agreed panels of experts might be questioned on prime-time television. Issues might be sequenced for debate and resolution, to avoid too much competition for people's time and attention. Variations on the Ackerman and Fishkin (2002) proposal for a ‘deliberation day’ before every election might be generalized, with a day every few months being given over to small meetings in local schools to discuss public issues. All that is pretty visionary, perhaps. And (although it is clearly beyond the scope of the present paper to explore them in depth) there are doubtless many other more-or-less visionary ways of introducing into real-world politics analogues of the elements that induce citizens’ jurors to practice ‘democratic deliberation within’, even before the jury discussion gets underway. Here, we have to content ourselves with identifying those features that need to be replicated in real-world politics in order to achieve that goal – and with the ‘possibility theorem’ that is established by the fact that (as sketched immediately above) there is at least one possible way of doing that for each of those key features.

#### Debate games are distinct from other forms of education and public speaking. Limits offset a priori moral high ground, creating de facto monologue without linking to their roleplaying bad offense

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Debate games are often based on pre-designed scenarios that include descriptions of issues to be debated, educational goals, game goals, roles, rules, time frames etc. In this way, **debate games differ from** textbooks and **everyday classroom** instruction as debate scenarios allow teachers and students to actively imagine, interact and communicate within a domain-specific game space. However, instead of mystifying debate games as a “magic circle” (Huizinga, 1950), I will try to overcome the epistemological dichotomy between “gaming” and “teaching” that tends to dominate discussions of educational games. In short, educational gaming is a form of teaching. As mentioned, education and games represent two different semiotic domains that both embody the three faces of knowledge: assertions, modes of representation and social forms of organisation (Gee, 2003; Barth, 2002; cf. chapter 2). In order to understand the interplay between these different domains and their interrelated knowledge forms, I will draw attention to a central assumption in Bakhtin’s dialogical philosophy. According to Bakhtin, all forms of communication and culture are subject to centripetal and centrifugal forces (Bakhtin, 1981). A centripetal force is the drive to impose one version of the truth, while a centrifugal force involves a range of possible truths and interpretations. This means that any form of expression involves a duality of centripetal and centrifugal forces: “Every concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear” (Bakhtin, 1981: 272). If we take teaching as an example, it is always affected by centripetal and centrifugal forces in the on-going negotiation of “truths” between teachers and students. In the words of Bakhtin: “Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction” (Bakhtin, 1984a: 110). Similarly, the dialogical space of debate games also embodies centrifugal and centripetal forces. Thus, the election scenario of The Power Game involves centripetal elements that are mainly determined by the rules and outcomes of the game, i.e. the election is based on a limited time frame and a fixed voting procedure. Similarly, the open-ended goals, roles and resources represent centrifugal elements and create virtually endless possibilities for researching, preparing, presenting, debating and evaluating a variety of key political issues. Consequently, the actual process of enacting a game scenario involves a complex negotiation between these centrifugal/centripetal forces that are inextricably linked with the teachers and students’ game activities. In this way, the enactment of The Power Game is a form of teaching that combines different pedagogical practices (i.e. group work, web quests, student presentations) and learning resources (i.e. websites, handouts, spoken language) within the interpretive frame of the election scenario. Obviously, tensions may arise if there is too much divergence between educational goals and game goals. This means that game facilitation requires a balance between focusing too narrowly on the rules or “facts” of a game (centripetal orientation) and a focusing too broadly on the contingent possibilities and interpretations of the game scenario (centrifugal orientation). For Bakhtin, the duality of centripetal/centrifugal forces often manifests itself as a dynamic between “monological” and “dialogical” forms of discourse. Bakhtin illustrates this point with the monological discourse of the Socrates/Plato dialogues in which the teacher never learns anything new from the students, despite Socrates’ ideological claims to the contrary (Bakhtin, 1984a). Thus, discourse becomes monologised when “someone who knows and possesses the truth instructs someone who is ignorant of it and in error”, where “a thought is either affirmed or repudiated” by the authority of the teacher (Bakhtin, 1984a: 81). In contrast to this, dialogical pedagogy fosters inclusive learning environments that are able to expand upon students’ existing knowledge and collaborative construction of “truths” (Dysthe, 1996). At this point, I should clarify that Bakhtin’s term “dialogic” is both a descriptive term (all utterances are per definition dialogic as they address other utterances as parts of a chain of communication) and a normative term as dialogue is an ideal to be worked for against the forces of “monologism” (Lillis, 2003: 197-8). In this project, I am mainly interested in describing the dialogical space of debate games. At the same time, I agree with Wegerif that “one of the goals of education, perhaps the most important goal, should be dialogue as an end in itself” (Wegerif, 2006: 61).

#### Policy debates require positions that upset ideologies—side switching as a model for deliberation is valuable because it’s distinct from pure discussion

**Gutmann and Thompson 1996** – \*president of Penn, former professor at Princeton, \*\* Alfred North Whitehead Professor of Political Philosophy at Harvard (Amy and Dennis, “Democracy and disagreement”, p. 1)

OF THE CHALLENGES that American democracy faces today, none is more formidable than the problem of moral disagreement. Neither the theory nor the practice of democratic politics has so far found an adequate way to cope with conflicts about fundamental values. We address the challenge of moral disagreement here by developing a conception of democracy that secures a central place for moral discussion in political life.

Along with a growing number of other political theorists, we call this conception deliberative democracy. The core idea is simple: when citizens or their representatives disagree morally, they should continue to reason together to reach mutually acceptable decisions. But the meaning and implications of the idea are complex. Although the idea has a long history, it is still in search of a theory. We do not claim that this book provides a comprehensive theory of deliberative democracy, but we do hope that it contributes toward its future development by showing the kind of delib-eration that is possible and desirable in the face of moral disagreement in democracies.

Some scholars have criticized liberal political theory for neglecting moral deliberation. Others have analyzed the philosophical foundations of deliberative democracy, and still others have begun to explore institutional reforms that would promote deliberation. Yet nearly all of them stop at the point where deliberation itself begins. None has systematically examined the substance of deliberation—the theoretical principles that should guide moral argument and their implications for actual moral disagreements about public policy. That is our subject, and it takes us into the everyday forums of democratic politics, where moral argument regularly appears but where theoretical analysis too rarely goes.

Deliberative democracy involves reasoning about politics, and nothing has been more controversial in political philosophy than the nature of reason in politics. We do not believe that these controversies have to be settled before deliberative principles can guide the practice of democracy. Since on occasion citizens and their representatives already engage in the kind of reasoning that those principles recommend, deliberative democracy simply asks that they do so more consistently and comprehensively. The best way to prove the value of this kind of reasoning is to show its role in arguments about specific principles and policies, and its contribution to actual political debates. That is also ultimately the best justification for our conception of deliberative democracy itself. But to forestall possible misunderstandings of our conception of deliberative democracy, we offer some preliminary remarks about the scope and method of this book.

The aim of the moral reasoning that our deliberative democracy pre-scribes falls between impartiality, which requires something like altruism, and prudence, which demands no more than enlightened self-interest. Its first principle is reciprocity, the subject of Chapter 2, but no less essential are the other principles developed in later chapters. When citizens reason reciprocally, they seek fair terms of social cooperation for their own sake; they try to find mutually acceptable ways of resolving moral disagreements.

The precise content of reciprocity is difficult to determine in theory, but its general countenance is familiar enough in practice. It can be seen in the difference between acting in one's self-interest (say, taking advantage of a legal loophole or a lucky break) and acting fairly (following rules in the spirit that one expects others to adopt). In many of the controversies dis-cussed later in the book, the possibility of any morally acceptable resolution depends on citizens' reasoning beyond their narrow self-interest and considering what can be justified to people who reasonably disagree with them. Even though the quality of deliberation and the conditions under which it is conducted are far from ideal in the controversies we consider, the fact that in each case some citizens and some officials make arguments consistent with reciprocity suggests that a deliberative perspective is not Utopian.

To clarify what reciprocity might demand under non-ideal conditions, we develop a distinction between deliberative and nondeliberative disa-greement. Citizens who reason reciprocally can recognize that a position is worthy of moral respect even when they think it morally wrong. They can believe that a moderate pro-life position on abortion, for example, is morally respectable even though they think it morally mistaken. (The abortion example—to which we often return in the book—is meant to be illustrative. For readers who deny that there is any room for deliberative disagreement on abortion, other political controversies can make the same point.) The presence of deliberative disagreement has important implications for how citizens treat one another and for what policies they should adopt. When a disagreement is not deliberative (for example, about a policy to legalize discrimination against blacks and women), citizens do not have any obligations of mutual respect toward their opponents. In deliberative disagreement (for example, about legalizing abortion), citizens should try to accommodate the moral convictions of their opponents to the greatest extent possible, without compromising their own moral convictions. We call this kind of accommodation an economy of moral disagreement, and believe that, though neglected in theory and practice, it is essential to a morally robust democratic life.

Although both of us have devoted some of our professional life to urging these ideas on public officials and our fellow citizens in forums of practical politics, this book is primarily the product of scholarly rather than political deliberation. Insofar as it reaches beyond the academic community, it is addressed to citizens and officials in their more reflective frame of mind. Given its academic origins, some readers may be inclined to complain that only professors could be so unrealistic as to believe that moral reasoning can help solve political problems. But such a complaint would misrepresent our aims.

To begin with, we do not think that academic discussion (whether in scholarly journals or college classrooms) is a model for moral deliberation in politics. Academic discussion need not aim at justifying a practical decision, as deliberation must. Partly for this reason, academic discussion is likely to be insensitive to the contexts of ordinary politics: the pressures of power, the problems of inequality, the demands of diversity, the exigencies of persuasion. Some critics of deliberative democracy show a similar insensitivity when they judge actual political deliberations by the standards of ideal philosophical reflection. Actual deliberation is inevitably defective, but so is philosophical reflection practiced in politics. The appropriate comparison is between the ideals of democratic deliberation and philosophical reflection, or between the application of each in the non-ideal circumstances of politics.

We do not assume that politics should be a realm where the logical syllogism rules. Nor do we expect even the more appropriate standard of mutual respect always to prevail in politics. A deliberative perspective sometimes justifies bargaining, negotiation, force, and even violence. It is partly because moral argument has so much unrealized potential in dem-ocratic politics that we believe it deserves more attention. Because its place in politics is so precarious, the need to find it a more secure home and to nourish its development is all the more pressing. Yet because it is also already part of our common experience, we have reason to hope that it can survive and even prosper if philosophers along with citizens and public officials better appreciate its value in politics.

Some readers may still wonder why deliberation should have such a prominent place in democracy. Surely, they may say, citizens should care more about the justice of public policies than the process by which they are adopted, at least so long as the process is basically fair and at least minimally democratic. One of our main aims in this book is to cast doubt on the dichotomy between policies and process that this concern assumes. Having good reason as individuals to believe that a policy is just does not mean that collectively as citizens we have sufficient justification to legislate on the basis of those reasons. The moral authority of collective judgments about policy depends in part on the moral quality of the process by which citizens collectively reach those judgments. Deliberation is the most appropriate way for citizens collectively to resolve their moral disagreements not only about policies but also about the process by which policies should be adopted. Deliberation is not only a means to an end, but also a means for deciding what means are morally required to pursue our common ends.

#### The impact outweighs—deliberative debate models impart skills vital to respond to complex challenges

Christian O. **Lundberg 10** Professor of Communications @ University of North Carolina, Chapel Hill, “Tradition of Debate in North Carolina” in Navigating Opportunity: Policy Debate in the 21st Century By Allan D. Louden, p. 311

The second major problem with the critique that identifies a naivety in articulating debate and democracy is that it presumes that the primary pedagogical outcome of debate is speech capacities. But the democratic capacities built by debate are not limited to speech—as indicated earlier, debate builds capacity for critical thinking, analysis of public claims, informed decision making, and better public judgment. If the picture of modem political life that underwrites this critique of debate is a pessimistic view of increasingly labyrinthine and bureaucratic administrative politics, rapid scientific and technological change outpacing the capacities of the citizenry to comprehend them, and ever-expanding insular special-interest- and money-driven politics, it is a puzzling solution, at best, to argue that these conditions warrant giving up on debate. If democracy is open to rearticulation, it is open to rearticulation precisely because as the challenges of modern political life proliferate, the citizenry's capacities can change, which is one of the primary reasons that theorists of democracy such as Ocwey in The Public awl Its Problems place such a high premium on education (Dewey 1988,63, 154). Debate provides an indispensible form of education in the modem articulation of democracy because it builds precisely the skills that allow the citizenry to research and be informed about policy decisions that impact them, to son rhroueh and evaluate the evidence for and relative merits of arguments for and against a policy in an increasingly infonnation-rich environment, and to prioritize their time and political energies toward policies that matter the most to them.

The merits of debate as a tool for building democratic capacity-building take on a special significance in the context of information literacy. John Larkin (2005, HO) argues that one of the primary failings of modern colleges and universities is that they have not changed curriculum to match with the challenges of a new information environment. This is a problem for the course of academic study in our current context, but perhaps more important, argues Larkin, for the future of a citizenry that will need to make evaluative choices against an increasingly complex and multimediatcd information environment (ibid-). Larkin's study tested the benefits of debate participation on information-literacy skills and concluded that in-class debate participants reported significantly higher self-efficacy ratings of their ability to navigate academic search databases and to effectively search and use other Web resources:

To analyze the self-report ratings of the instructional and control group students, we first conducted a multivariate analysis of variance on all of the ratings, looking jointly at the effect of instmction/no instruction and debate topic . . . that it did not matter which topic students had been assigned . . . students in the Instnictional [debate) group were significantly more confident in their ability to access information and less likely to feel that they needed help to do so----These findings clearly indicate greater self-efficacy for online searching among students who participated in (debate).... These results constitute strong support for the effectiveness of the project on students' self-efficacy for online searching in the academic databases. There was an unintended effect, however: After doing ... the project, instructional group students also felt more confident than the other students in their ability to get good information from Yahoo and Google. It may be that the library research experience increased self-efficacy for any searching, not just in academic databases. (Larkin 2005, 144)

Larkin's study substantiates Thomas Worthcn and Gaylcn Pack's (1992, 3) claim that debate in the college classroom plays a critical role in fostering the kind of problem-solving skills demanded by the increasingly rich media and information environment of modernity. Though their essay was written in 1992 on the cusp of the eventual explosion of the Internet as a medium, Worthcn and Pack's framing of the issue was prescient: the primary question facing today's student has changed from how to best research a topic to the crucial question of learning how to best evaluate which arguments to cite and rely upon from an easily accessible and veritable cornucopia of materials.

There are, without a doubt, a number of important criticisms of employing debate as a model for democratic deliberation. But cumulatively, the evidence presented here warrants strong support for expanding debate practice in the classroom as a technology for enhancing democratic deliberative capacities. The unique combination of critical thinking skills, research and information processing skills, oral communication skills, and capacities for listening and thoughtful, open engagement with hotly contested issues argues for debate as a crucial component of a rich and vital democratic life. In-class debate practice both aids students in achieving the best goals of college and university education, and serves as an unmatched practice for creating thoughtful, engaged, open-minded and self-critical students who are open to the possibilities of meaningful political engagement and new articulations of democratic life.

Expanding this practice is crucial, if only because the more we produce citizens that can actively and effectively engage the political process, the more likely we are to produce revisions of democratic life that are necessary if democracy is not only to survive, but to thrive. Democracy faces a myriad of challenges, including: domestic and international issues of class, gender, and racial justice; wholesale environmental destruction and the potential for rapid climate change; emerging threats to international stability in the form of terrorism, intervention and new possibilities for great power conflict; and increasing challenges of rapid globalization including an increasingly volatile global economic structure. More than any specific policy or proposal, an informed and active citizenry that deliberates with greater skill and sensitivity provides one of the best hopes for responsive and effective democratic governance, and by extension, one of the last best hopes for dealing with the existential challenges to democracy [in an] increasingly complex world.

#### Iris Young is wrong—deliberation is an alternative to in-round activism because it requires continual testing that bolsters advocacy and inclusion—refusal of side switching leads to group polarization and isolation

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two specific individuals in an article by Iris Young

Nonetheless, the deliberativist conception of reasonableness differs from the activist’s in at least one crucial respect. On the deliberativist view, a necessary condition for reasonableness is the willingness not only to offer justifications for one’s own views and actions, but also to listen to criticisms, objections, and the justificatory reasons that can be given in favor of alternative proposals.

In light of this further stipulation, we may say that, on the deliberative democrat’s view, reasonable citizens are responsive to reasons, their views are ‘reason tracking’. Reasonableness, then, entails an acknowledgement on the part of the citizen that her current views are possibly mistaken, incomplete, and in need of revision. Reasonableness is hence a two-way street: the reasonable citizen is able and willing to offer justifications for her views and actions, but is also prepared to consider alternate views, respond to criticism, answer objections, and, if necessary, revise or abandon her views. In short, reasonable citizens do not only believe and act for reasons, they aspire to believe and act according to the best reasons; consequently, they recognize their own fallibility in weighing reasons and hence engage in public deliberation in part for the sake of improving their views.15 ‘Reasonableness’ as the deliberative democrat understands it is constituted by a willingness to participate in an ongoing public discussion that inevitably involves processes of self-examination by which one at various moments rethinks and revises one’s views in light of encounters with new arguments and new considerations offered by one’s fellow deliberators. Hence Gutmann and Thompson write:

Citizens who owe one another justifications for the laws that they seek to impose must take seriously the reasons their opponents give. Taking seriously the reasons one’s opponents give means that, at least for a certain range of views that one opposes, one must acknowledge the possibility that an opposing view may be shown to be correct in the future. This acknowledgement has implications not only for the way they regard their own views. It imposes an obligation to continue to test their own views, seeking forums in which the views can be challenged, and keeping open the possibility of their revision or even rejection.16 (2000: 172)

That Young’s activist is not reasonable in this sense is clear from the ways in which he characterizes his activism. He claims that ‘Activities of protest, boycott, and disruption are more appropriate means for getting citizens to think seriously about what until then they have found normal and acceptable’ (106); activist tactics are employed for the sake of ‘bringing attention’ to injustice and making ‘a wider public aware of institutional wrongs’ (107). These characterizations suggest the presumption that questions of justice are essentially settled; the activist takes himself to know what justice is and what its implementation requires. He also believes he knows that those who oppose him are either the power-hungry beneficiaries of the unjust status quo or the inattentive and unaware masses who do not ‘think seriously’ about the injustice of the institutions that govern their lives and so unwittingly accept them. Hence his political activity is aimed exclusively at enlisting other citizens in support of the cause to which he is tenaciously committed.

The activist implicitly holds that there could be no reasoned objection to his views concerning justice, and no good reason to endorse those institutions he deems unjust. The activist presumes to know that no deliberative encounter could lead him to reconsider his position or adopt a different method of social action; he ‘declines’ to ‘engage persons he disagrees with’ (107) in discourse because he has judged on a priori grounds that all opponents are either pathetically benighted or balefully corrupt. When one holds one’s view as the only responsible or just option, there is no need for reasoning with those who disagree, and hence no need to be reasonable.

According to the deliberativist, this is the respect in which the activist is unreasonable. The deliberativist recognizes that questions of justice are difficult and complex. This is the case not only because justice is a notoriously tricky philosophical concept, but also because, even supposing we had a philosophically sound theory of justice, questions of implementation are especially thorny. Accordingly, political philosophers, social scientists, economists, and legal theorists continue to work on these questions. In light of much of this literature, it is difficult to maintain the level of epistemic confidence in one’s own views that the activist seems to muster; thus the deliberativist sees the activist’s confidence as evidence of a lack of honest engagement with the issues. A possible outcome of the kind of encounter the activist ‘declines’ (107) is the realization that the activist’s image of himself as a ‘David to the Goliath of power wielded by the state and corporate actors’ (106) is naïve. That is, the deliberativist comes to see, through processes of public deliberation, that there are often good arguments to be found on all sides of an important social issue; reasonableness hence demands that one must especially engage the reasons of those with whom one most vehemently disagrees and be ready to revise one’s own views if necessary. Insofar as the activist holds a view of justice that he is unwilling to put to the test of public criticism, he is unreasonable. Furthermore, insofar as the activist’s conception commits him to the view that there could be no rational opposition to his views, he is literally unable to be reasonable. Hence the deliberative democrat concludes that activism, as presented by Young’s activist, is an unreasonable model of political engagement.

The dialogical conception of reasonableness adopted by the deliberativist also provides a response to the activist’s reply to the charge that he is engaged in interest group or adversarial politics. Recall that the activist denied this charge on the grounds that activism is aimed not at private or individual interests, but at the universal good of justice. But this reply also misses the force of the posed objection. On the deliberativist view, the problem with interest-based politics does not derive simply from the source (self or group), scope (particular or universal), or quality (admirable or deplorable) of the interest, but with the concept of interests as such. Not unlike ‘preferences’, ‘interests’ typically function in democratic theory as fixed dispositions that are non-cognitive and hence unresponsive to reasons. Insofar as the activist sees his view of justice as ‘given’ and not open to rational scrutiny, he is engaged in the kind of adversarial politics the deliberativist rejects.

The argument thus far might appear to turn exclusively upon different conceptions of what reasonableness entails. The deliberativist view I have sketched holds that reasonableness involves some degree of what we may call epistemic modesty. On this view, the reasonable citizen seeks to have her beliefs reflect the best available reasons, and so she enters into public discourse as a way of testing her views against the objections and questions of those who disagree; hence she implicitly holds that her present view is open to reasonable critique and that others who hold opposing views may be able to offer justifications for their views that are at least as strong as her reasons for her own. Thus any mode of politics that presumes that discourse is extraneous to questions of justice and justification is unreasonable. The activist sees no reason to accept this. Reasonableness for the activist consists in the ability to act on reasons that upon due reflection seem adequate to underwrite action; discussion with those who disagree need not be involved. According to the activist, there are certain cases in which he does in fact know the truth about what justice requires and in which there is no room for reasoned objection. Under such conditions, the deliberativist’s demand for discussion can only obstruct justice; it is therefore irrational.

It may seem that we have reached an impasse. However, there is a further line of criticism that the activist must face. To the activist’s view that at least in certain situations he may reasonably decline to engage with persons he disagrees with (107), the deliberative democrat can raise the phenomenon that Cass Sunstein has called ‘group polarization’ (Sunstein, 2003; 2001a: ch. 3; 2001b: ch. 1). To explain: consider that political activists cannot eschew deliberation altogether; they often engage in rallies, demonstrations, teach-ins, workshops, and other activities in which they are called to make public the case for their views. Activists also must engage in deliberation among themselves when deciding strategy. Political movements must be organized, hence those involved must decide upon targets, methods, and tactics; they must also decide upon the content of their pamphlets and the precise messages they most wish to convey to the press. Often the audience in both of these deliberative contexts will be a self-selected and sympathetic group of like-minded activists.

Group polarization is a well-documented phenomenon that has ‘been found all over the world and in many diverse tasks’; it means that ‘members of a deliberating group predictably move towards a more extreme point in the direction indicated by the members’ predeliberation tendencies’ (Sunstein, 2003: 81–2). Importantly, in groups that ‘engage in repeated discussions’ over time, the polarization is even more pronounced (2003: 86). Hence discussion in a small but devoted activist enclave that meets regularly to strategize and protest ‘should produce a situation in which individuals hold positions more extreme than those of any individual member before the series of deliberations began’ (ibid.).17

The fact of group polarization is relevant to our discussion because the activist has proposed that he may reasonably decline to engage in discussion with those with whom he disagrees in cases in which the requirements of justice are so clear that he can be confident that he has the truth. Group polarization suggests that deliberatively confronting those with whom we disagree is essential even when we have the truth. For even if we have the truth, if we do not engage opposing views, but instead deliberate only with those with whom we agree, our view will shift progressively to a more extreme point, and thus we lose the truth. In order to avoid polarization, deliberation must take place within heterogeneous ‘argument pools’ (Sunstein, 2003: 93). This of course does not mean that there should be no groups devoted to the achievement of some common political goal; it rather suggests that engagement with those with whom one disagrees is essential to the proper pursuit of justice. Insofar as the activist denies this, he is unreasonable.

#### Their critiques of debate miss the mark—defending a topic that involves the state for the sake of deliberation is distinct from accepting it, and limiting out some arguments for that is a more energized discourse that solves the aff better

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two specific individuals in an article by Iris Young

These two serious activist challenges may be summarized as follows. First, the activist has claimed that political discussion must always take place within the context of existing institutions that due to structural inequality grant to certain individuals the power to set discussion agendas and constrain the kinds of options open for consideration prior to any actual encounter with their deliberative opponents; the deliberative process is in this sense rigged from the start to favor the status quo and disadvantage the agents of change. Second, the activist has argued that political discussion must always take place by means of antecedent ‘discourses’ or vocabularies which establish the conceptual boundaries of the deliberation and hence may themselves be hegemonic or systematically distorting; the deliberative process is hence subject to the distorting influence of ideology at the most fundamental level, and deliberative democrats do not have the resources by which such distortions can be addressed. As they aim to establish that the deliberativist’s program is inconsistent with her own democratic objectives, this pair of charges is, as Young claims, serious (118). However, I contend that the deliberativist has adequate replies to them both.

Part of the response to the first challenge is offered by Young herself. The deliberative democrat does not advocate public political discussion only at the level of state policy, and so does not advocate a program that must accept as given existing institutional settings and contexts for public discussion. Rather, the deliberativist promotes an ideal of democratic politics according to which deliberation occurs at all levels of social association, including households, neighborhoods, local organizations, city boards, and the various institutions of civil society. The longrun aim of the deliberative democrat is to cultivate a more deliberative polity, and the deliberativist claims that this task must begin at more local levels and apart from the state and its policies. We may say that deliberativism promotes a ‘decentered’ (Habermas, 1996: 298) view of public deliberation and a ‘pluralistic’ (Benhabib, 2002: 138) model of the public sphere; in other words, the deliberative democrat envisions a ‘multiple, anonymous, heterogeneous network of many publics and public conversations’ (Benhabib, 1996b: 87). The deliberativist is therefore committed to the creation of ‘an inclusive deliberative setting in which basic social and economic structures can be examined’; these settings ‘for the most part must be outside ongoing settings of official policy discussion’ (115).

Although Young characterizes this decentered view of political discourse as requiring that deliberative democrats ‘withdraw’ (115) from ‘existing structural circumstances’ (118), it is unclear that this follows. There certainly is no reason why the deliberativist must choose between engaging arguments within existing deliberative sites and creating new ones that are removed from established institutions. There is no need to accept Young’s dichotomy; the deliberativist holds that work must be done both within existing structures and within new contexts. As Bohman argues,

Deliberative politics has no single domain; it includes such diverse activities as formulating and achieving collective goals, making policy decisions and means and ends, resolving conflicts of interest and principle, and solving problems as they emerge in ongoing social life. Public deliberation therefore has to take many forms. (1996: 53)

The second challenge requires a detailed response, so let us begin with a closer look at the proposed argument. The activist has moved quickly from the claim that discourses can be systematically distorting to the claim that all political discourse operative in our current contexts is systematically distorting. The conclusion is that properly democratic objectives cannot be pursued by deliberative means. The first thing to note is that, as it stands, the conclusion does not follow from the premises; the argument is enthymematic. What is required is the additional premise that the distorting features of discussion cannot be corrected by further discussion. That discussion cannot rehabilitate itself is a crucial principle in the activist’s case, but is nowhere argued.

Moreover, the activist has given no arguments to support the claim that present modes of discussion are distorting, and has offered no analysis of how one might detect such distortions and discern their nature.20 Rather than providing a detailed analysis of the phenomenon of systematic distortion, Young provides (in her own voice) two examples of discourses that she claims are hegemonic. First she considers discussions of poverty that presume the adequacy of labor market analyses; second she cites discussions of pollution that presume that modern economies must be based on the burning of fossil-fuels. In neither case does she make explicit what constitutes the distortion. At most, her examples show that some debates are framed in ways that render certain types of proposals ‘out of bounds’. But surely this is the case in any discussion, and it is not clear that it is in itself always a bad thing or even ‘distorting’. Not all discursive exclusions are distortions because the term ‘distortion’ implies that something is being excluded that should be included.

Clearly, then, there are some dialectical exclusions that are entirely appropriate. For example, it is a good thing that current discussions of poverty are often cast in terms that render white supremacist ‘solutions’ out of bounds; it is also good that pollution discourses tend to exclude fringe-religious appeals to the cleansing power of mass prayer. This is not to say that opponents of market analyses of poverty are on par with white supremacists or that Greens are comparable to fringe-religious fanatics; it is rather to press for a deeper analysis of the discursive hegemony that the activist claims undermines deliberative democracy. It is not clear that the requested analysis, were it provided, would support the claim that systematic distortions cannot be addressed and remedied within the processes of continuing discourse. There are good reasons to think that continued discussion among persons who are aware of the potentially hegemonic features of discourse can correct the distorting factors that exist and block the generation of new distortions.

As Young notes (116), James Bohman (1996: ch. 3) has proposed a model of deliberation that incorporates concerns about distorted communication and other forms of deliberative inequality within a general theory of deliberative democracy; the recent work of Seyla Benhabib (2002) and Robert Goodin (2003: chs 9–11) aims for similar goals. Hence I conclude that, as it stands, the activist’s second argument is incomplete, and as such the force of the difficulty it raises for deliberative democracy is not yet clear. If the objection is to stick, the activist must first provide a more detailed examination of the hegemonic and distorting properties of discourse; he must then show both that prominent modes of discussion operative in our democracy are distorting in important ways and that further discourse cannot remedy these distortions.

### 2nc cards

#### ‘Energy production’ as a term refers to primary production

NBSC (National Bureau of Statistics of China) 2002 “7. Production and Consumption of Energy” http://www.stats.gov.cn/english/classificationsmethods/definitions/t20020517\_402787580.htm

Total Energy Production refers to the total production of primary energy by all energy producing enterprises in the country in a given period of time. It is a comprehensive indicator to show the capacity, scale, composition and development of energy production of the country. The production of primary energy includes that of coal, crude oil, natural gas, hydro-power and electricity generated by nuclear energy and other means such as wind power and geothermal power. However, **it excludes** the production of fuels of low calorific value, bio-energy, solar energy and the **secondary energy** converted from the primary energy.

#### The resolution indicates affs should advocate topical government change

**Ericson 3** (Jon M., Dean Emeritus of the College of Liberal Arts – California Polytechnic U., et al., The Debater’s Guide, Third Edition, p. 4)

The Proposition of Policy: Urging Future Action In policy propositions, each topic contains **certain key elements**, although they have slightly different functions from comparable elements of value-oriented propositions. 1. **An agent** doing the acting ---“The United States” in “The United States should adopt a policy of free trade.” Like the object of evaluation in a proposition of value, the agent is the subject of the sentence. 2. The verb should—the first part of a verb phrase that urges action. 3. An action verb to follow should in the should-verb combination. For example, should adopt here means to put a program or policy into action though governmental means. 4. A specification of directions or a limitation of the action desired. The phrase free trade, for example, gives direction and limits to the topic, which would, for example, eliminate consideration of increasing tariffs, discussing diplomatic recognition, or discussing interstate commerce. Propositions of policy deal with future action. Nothing has yet occurred. The entire debate is about whether something ought to occur. What you agree to do, then, when you accept the affirmative side in such a debate is to offer sufficient and compelling reasons for an audience to perform the future action that you propose.

#### Here’s some useful background—the Talisse article we’re reading is a refutation of the comparison between activism and deliberation that Young posits in her article

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two male figures in an article by Iris Young

Accordingly, Young’s dialectic between the deliberativist and the activist is of crucial import to the theorist of deliberative democracy, and the challenges she poses need to be addressed. I shall argue in this article that the rejoinders Young develops on behalf of the activist to deliberativist criticisms of activism are insufficient, and that the deliberativist can muster stronger responses to activist challenges to deliberative democracy than those suggested by Young.11 My aspiration, then, is not to resolve the tension between activism and deliberativism, but to bolster the position of the deliberative democrat in the dialectic to which Young has called our attention; in this way, the tension between the two visions of democratic citizenship is punctuated and thus more thoroughly problematized for both the deliberativist and the activist. Hence my arguments constitute a call not simply for caution among deliberative democrats, but for further critical engagement between deliberativists and activists. Along the way, I hope to underscore elements of the deliberative democrat’s position that are insufficiently theorized in Young’s presentation.

#### No link—our claim is not that you should assume the identity of your oppressor or cast aside subjectivity. The resolution requires a normative stance because both sides can contest and prepare multiple perspectives in advance. There's a fundamental difference between claiming something should change and roleplaying.

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The first two challenges are focused on the failure of existing political institutions and processes to satisfy the ideals of publicity, accountability, and inclusion (109) that are promoted by the deliberative democrat. First, the activist points to the exclusionary character of existing sites of deliberation, citing the prevalence of structural inequality and power (108). Second, he criticizes recent measures aimed at inclusion for falling ‘far short of providing opportunities for real voice for those less privileged in the social structures’ (112).

Insofar as the activist’s criticisms are aimed at the failure of existing institutions to live up to the deliberative ideal, **they implicitly accept that ideal**. Thus, as Young points out, the deliberativist **can agree** with the activist that current conditions fall short of the democratic ideal, and can accept the activist’s specific criticisms of the existing order (112). Again, they differ on the issue of **means**, not ends: the deliberativist holds that processes of continuing public discourse can **reveal** and remedy the **shortcomings** of existing institutions and practices whereas the activist doubts that rational discussion can persuade powerful social agents to adopt a more inclusive and democratic mode of politics (112). The deliberativist may further argue that even if the activist’s suspicions regarding the efficacy of political deliberation are granted, these suspicions are not in themselves sufficient grounds for rejecting deliberative democracy. Though not ideal, deliberation may still be the best option available for democracy.

#### No link: dialectical responsiveness is distinct from exclusion because conversations must be goal-oriented to settle a certain question for the ballot to make sense—their offense doesn’t assume game spaces

**Walton 4** (Douglas, Full Professor of Philosophy – U Winnipeg, Relevance in Argumentation, p. 169-170)

The kind of relevance defined in the new theory can be called dialectical relevance, meaning that an argument, a question, or other type of speech act is judged to be relevant insofar as it plays a part, or has a function, in a **goal-directed** conversation that is a dialogue exchange between two participants who are aware of each other’s moves. The ultimate aim of a system of dialectical relevance is to be useful in judging cases for material relevance, primarily cases where an argument is central. To judge whether a given argument is normatively relevant, basically one has to judge whether, as used in the given case, it meets the normative standards of reasonable argument appropriate for that case. To determine what normative standard is appropriate, one has to ask the basic question, What purpose is the argument supposedly being used for? To answer that question, one has to examine the evidence given in the text and context of dialogue in that case and ask what type of dialogue this case is supposed to be part of. Then the more detailed evaluation can go from there, depending on the goal of that type of dialogue. For example, suppose the dialogue is supposed to be a critical discussion. The purpose of a critical discussion is to resolve a conflict of opinions. Thus, the argument in the given case can be judged to be relevant if it used in such a way as to contribute to the resolution of the conflict of opinions supposedly at issue in the critical discussion. The argument is relevant if it contributes to the goal of the critical discussion at whatever stage it was used. It is irrelevant if it does not. Why should argumentation in a natural conversation be assumed to be goal directed? One might object that a lot of the ordinary conversations we have in everyday life do not appear to be goal directed. Two people may meet in the street and have a casual conversation about whether it is a nice day or not. It would seem to be artificial to describe their conversation as goal directed, implying that the two had agreed in advance to undertake this argument about the weather for some specific purpose. If they switch to talking about something else, is that a bad thing? Should it be criticized as “irrelevant”? If not, the problem is that a criticism of irrelevance seems arbitrary or even unfair. The solution to this problem is to clearly recognize that judgments about the dialectical relevance of an argument confer a stamp of approval of admissibility on the argument as rational or as used correctly in a given case with respect to its serving some purpose. To say that an argument is dialectically relevant or irrelevant is not to say that it is faulty or fallacious in every respect or that it has been incorrectly with respect to every goal that the participants are trying to achieve in a given case. There is a parallel here with applying deductive logic to arguments. To say that an argument is deductively valid is not to say that is good argument in every respect or that it is fallacy free. For a deductively valid argument could be based on false premises, or it could be a circular argument, or it could exhibit many kinds of faults. To say that an argument is deductively valid is only to say that the argument is correct or rational in a conditional sense—it is to say that if the premises are true, then the conclusion must (by logical necessity) be true too. Comparably, to say that an argument is dialectically relevant in a given case is not to say that the argument is perfectly rational, in relation to any goals that might be important the participants. It is only to say that it has the potential to be used correctly or rationally in a conditional or instrumental sense. It is to say that the argument has the potential to be used in such a way as to contribute to the type of discussion the participants are supposed to be engaged in. But you can always raise the question of what type of discussion the participants should really be engaged in. You can ask whether the agenda of that discussion ought to be changed if they are to solve the underlying problem they confront. So if two disputants are arguing about the weather, and one of them suddenly starts to argue about baseball or the price of new cars, the switch of topics is not necessarily a bad thing at all. But from the perspective of the two arguers who hope to resolve their difference of opinions about the weather by using rational argumentation, the switch to baseball may be viewed as dialectically irrelevant. This means that it turns the argumentation away from the direction needed for fulfilling its original purpose. At any rate, we can see that dialectical relevance has its place. Although it is not a requirement of all human communication, it is a useful requirement for reasoned argumentation of various kinds that are quite important in human communication.

### 1nr cards

#### The argument that our framework is systemically bias is a self-serving assertion to sidestep clash—all of their reasons not to defend the topic can be appropriated by actors with opposite goals

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two specific individuals in an article by Iris Young

My call for a more detailed articulation of the second activist challenge may be met with the radical claim that I have begged the question. It may be said that my analysis of the activist’s challenge and my request for a more rigorous argument presume what the activist denies, namely, that arguments and reasons operate independently of ideology. Here the activist might begin to think that he made a mistake in agreeing to engage in a discussion with a deliberativist – his position throughout the debate being that one should decline to engage in argument with one’s opponents! He may say that of course activism seems lacking to a deliberativist, for the deliberativist measures the strength of a view according to her own standards. But the activist rejects those standards, claiming that they are appropriate only for seminar rooms and faculty meetings, not for real-world politics. Consequently the activist may say that by agreeing to enter into a discussion with the deliberativist, he had unwittingly abandoned a crucial element of his position. He may conclude that the **consistent** activist avoids arguing altogether, and communicates **only with** his **comrades**. Here the discussion ends.

However, the deliberativist has a further consideration to raise as his discursive partner departs for the next rally or street demonstration. The foregoing debate had presumed that there is but one kind of activist and but one set of policy objectives that activists may endorse. Yet Young’s activist is opposed not only by deliberative democrats, but also by persons who **also call themselves ‘activists’** and who are committed to a set of policy objectives quite different from those endorsed by this one activist. Once these opponents are introduced into the mix, the stance of Young’s activist becomes more evidently problematic, even by his own standards.

To explain: although Young’s discussion associates the activist always with politically progressive causes, such as the abolition of the World Trade Organization (109), the expansion of healthcare and welfare programs (113), and certain forms of environmentalism (117), not all activists are progressive in this sense. **Activists on the extreme and racist Right claim also to be fighting for justice,** fairness, **and liberation**. They contend that existing processes and institutions are ideologically hegemonic and distorting. Accordingly, **they reject the deliberative ideal on the same grounds** as Young’s activist. They advocate a program of political action that operates outside of prevailing structures, disrupting their operations and challenging their legitimacy. They claim that such action aims to enlighten, inform, provoke, and excite persons they see as complacent, naïve, excluded, and ignorant. Of course, these activists vehemently oppose the policies endorsed by Young’s activist; they argue that justice requires activism that promotes objectives such as national purity, the disenfranchisement of Jews, racial segregation, and white supremacy. More importantly, they see Young’s activist’s **vocabulary of ‘inclusion’, ‘structural inequality’, ‘institutionalized power’, as fully in line** with what they claim is a hegemonic ideology that currently dominates and systematically distorts our political discourses.21

The point here is not to imply that Young’s activist is no better than the racist activist. The point rather is that Young’s activist’s arguments are, in fact, adopted by activists of different stripes and **put in** the **service** of a wide range of policy objectives, each claiming to be just, liberatory, and properly inclusive.22 In light of this, there is a question the activist must confront. How should he deal with those who share his views about the proper means for bringing about a more just society, but promote a set of ends that he opposes?

It seems that Young’s activist has no way to deal with opposing activist programs except to fight them or, if fighting is strategically unsound or otherwise problematic, to accept a Hobbesian truce. This might not seem an unacceptable response in the case of racists; however, the question can be raised in the case of any less extreme but nonetheless opposed activist program, including different styles of politically progressive activism. Hence the deliberativist raises her earlier suspicions that, in practice, activism entails a politics based upon **interestbased power struggles amongst adversarial factions**.

#### No link to rules or predictability bad—our argument isn't rules-based in the sense they identify, it’s a set of contestable guidelines for evaluating competitions. Rejecting the topic because rules are oppressive doesn’t solve and only a standard like the resolution is limited enough to enable preparation and testing but has enough internal complexity to solve their impact

**Armstrong 2K** – Paul B. Armstrong, Professor of English and Dean of the College of Arts and Sciences at the State University of New York at Stony Brook, Winter 2000, “The Politics of Play: The Social Implications of Iser's Aesthetic Theory,” New Literary History, Vol. 31, No. 1, p. 211-223

\*aleatory = depending on luck, i.e. the throw of a die

Such a play-space also opposes the notion that the only alternative to the coerciveness of consensus must be to advocate the sublime powers of rule-breaking.8 Iser shares Lyotard’s concern that to privilege harmony and agreement in a world of heterogeneous language games is to limit their play and to inhibit semantic innovation and the creation of new games. Lyotard’s endorsement of the “sublime”—the pursuit of the “unpresentable” by rebelling against restrictions, defying norms, and smashing the limits of existing paradigms—is undermined by contradictions, however, which Iser’s explication of play recognizes and addresses. The paradox of the unpresentable, as Lyotard acknowledges, is that it can only be manifested through a game of representation. The sublime is, consequently, in Iser’s sense, an instance of doubling. If violating norms creates new games, this crossing of boundaries **depends on** and carries in its wake the conventions and structures it oversteps. The sublime may be uncompromising, asocial, and unwilling to be bound by limits, but its pursuit of what is not contained in any order or system makes it dependent on the forms it opposes. ¶ The radical presumption of the sublime is not only terroristic in refusing to recognize the claims of other games whose rules it declines to limit itself by. It is also naive and self-destructive in its impossible imagining that it can do without the others it opposes. As a structure of doubling, the sublime pursuit of the unpresentable requires a play-space that includes other, less radical games with which it can interact. Such conditions of exchange would be provided by the nonconsensual reciprocity of Iserian play. ¶ Iser’s notion of play offers a way of conceptualizing power which acknowledges the necessity and force of disciplinary constraints without seeing them as unequivocally coercive and determining. The contradictory combination of restriction and openness in how play deploys power is evident in Iser’s analysis of “regulatory” and “aleatory” rules. Even the regulatory rules, which set down the conditions participants submit to in order to play a game, “permit a certain range of combinations while also establishing a code of possible play. . . . Since these rules limit the text game without producing it, they are regulatory but not prescriptive. They do no more than set the aleatory in motion, and the aleatory rule differs from the regulatory in that it has no code of its own” (FI 273). Submitting to the discipline of regulatory restrictions is both constraining and enabling because it makes possible certain kinds of interaction that the rules cannot completely predict or prescribe in advance. Hence the existence of aleatory rules that are not codified as part of the game itself but are the variable customs, procedures, and practices for playing it. Expert facility with aleatory rules marks the difference, for example, between someone who just knows the rules of a game and another who really knows how to play it. Aleatory rules are more flexible and openended and more susceptible to variation than regulatory rules, but they too are characterized by a contradictory combination of constraint and possibility, limitation and unpredictability, discipline and spontaneity.

#### Authenticity tests shut down debate—there’s no means for us to debate against their personal position in a competitive format

**Subotnik 1998** – professor of law, Touro College, Jacob D. Fuchsberg Law Center (7 Cornell J. L. & Pub. Pol'y 681)

Having traced a major strand in the development of CRT, we turn now to the strands' effect on the relationships of CRATs with each other and with outsiders. As the foregoing material suggests, the central CRT message is not simply that minorities are being treated unfairly, or even that individuals out there are in pain - assertions for which there are data to serve as grist for the academic mill - but that **the minority scholar** himself or herself hurts and hurts badly.

An important problem that concerns the very definition of the scholarly enterprise now comes into focus. What can an academic trained to [\*694] question and to doubt n72 possibly say to Patricia Williams when effectively she announces, "I hurt bad"? n73 "No, you don't hurt"? "You shouldn't hurt"? "Other people hurt too"? Or, most dangerously - and perhaps most tellingly - "What do you expect when you keep shooting yourself in the foot?" If the majority were perceived as having the well- being of minority groups in mind, these responses might be acceptable, even welcomed. And they might lead to real conversation. But, writes Williams, the failure by those "cushioned within the invisible privileges of race and power... to incorporate a sense of precarious connection as a part of our lives is... ultimately obliterating." n74

"Precarious." "Obliterating." These words will clearly invite responses only from fools and sociopaths; they will, by **effectively precluding objection**, disconcert and disunite others. "I hurt," in academic discourse, has three broad though interrelated effects. First, it demands priority from the reader's conscience. It is for this reason that law review editors, waiving usual standards, have privileged a long trail of undisciplined - even silly n75 - destructive and, above all, self-destructive arti [\*695] cles. n76 Second, by emphasizing the emotional bond between those who hurt in a similar way, "I hurt" discourages fellow sufferers from abstracting themselves from their pain in order to gain perspective on their condition. n77

[\*696] Last, as we have seen, it precludes the possibility of **open and structured conversation** with others. n78

[\*697] It is because of this conversation-stopping effect of what they insensitively call "first-person agony stories" that Farber and Sherry deplore their use. "The norms of academic civility hamper readers from challenging the accuracy of the researcher's account; it would be rather difficult, for example, to criticize a law review article by questioning the author's emotional stability or veracity." n79 Perhaps, a better practice would be to put the scholar's experience on the table, along with other relevant material, but to subject that experience to the same level of scrutiny.

If through the foregoing rhetorical strategies CRATs succeeded in limiting academic debate, why do they not have greater influence on public policy? Discouraging white legal scholars from entering the national conversation about race, n80 I suggest, has generated a kind of cynicism in white audiences which, in turn, has had precisely the reverse effect of that ostensibly desired by CRATs. It drives the American public to the right and ensures that anything CRT offers is reflexively rejected.

In the absence of scholarly work by white males in the area of race, of course, it is difficult to be sure what reasons they would give for not having rallied behind CRT. Two things, however, are certain. First, the kinds of issues raised by Williams are too important in their implications  [\*698]  for American life to be confined to communities of color. If the lives of minorities are heavily constrained, if not fully defined, by the thoughts and actions of the majority elements in society, it would seem to be of great importance that white thinkers and doers participate in open discourse to bring about change. Second, given the lack of engagement of CRT by the community of legal scholars as a whole, the discourse that should be taking place at the highest scholarly levels has, by default, been displaced to faculty offices and, more generally, the streets and the airwaves.

#### Equating personalization and radical pedagogy requires ontological policing to assess the authenticity of claims—turns case

**Scott, 92** – professor of sociology at Princeton (Joan, “Multiculturalism and the Politics of Identity,” The Identity in Question (Summer, 1992), pp. 12-19, JSTOR)

There is nothing wrong, on the face of it, with teaching individuals about how to behave decently in relation to others and about how to empathize with each other's pain. The problem is that difficult analyses of how history and social standing, privilege, and subordination are involved in personal behavior entirely drop out. Chandra Mohanty puts it this way:

There has been an erosion of the politics of collectivity through the reformulation of race and difference in individualistic terms. The 1960s and '70s slogan "the personal is political" has been recraftedin the 1980s as "the political is personal." In other words, all politics is collapsed into the personal, and questions of individual behaviors, attitudes, and life-styles stand in for political analysis of the social. Individual political struggles are seen as the only relevant and legitimate form of political struggle.5

Paradoxically, individuals then generalize their perceptions and claim to speak for a whole group, but the groups are also conceived as unitary and autonomous. This individualizing, personalizing conception has also been behind some of the recent identity politics of minorities; indeed it gave rise to the intolerant, doctrinaire behavior that was dubbed, initially by its internal critics, "political correctness."

It is particularly in the notion of "experience" that one sees this operating. In much current usage of "experience," references to structure and history are implied but not made explicit; instead, personal testimony of oppression re-places analysis, and this testimony comes to stand for the experience of the whole group. The fact of **belonging to an identity group is taken as authority** enough for one's speech; the direct experience of a group or culture-that is, membership in it-becomes the only test of true knowledge.

The exclusionary implications of this are twofold: all those not of the group are denied even intellectual access to it, and those within the group whose experiences or interpretations do not conform to the established terms of identity must either suppress their views or drop out. An appeal to "experience" of this kind forecloses discussion and criticism and **turns politics into a policing operation**: the borders of identity are patrolled for signs of nonconformity; the test of membership in a group becomes less one's willingness to endorse certain principles and engage in specific political actions, less one's positioning in specific relationships of power, than one's ability to use the prescribed languages that are taken as signs that one is inherently "of" the group. That all of this isn't recognized as a highly political process that produces identities is troubling indeed, especially because it so closely mimics the politics of the powerful, naturalizing and deeming as discernably objective facts the prerequisites for inclusion in any group.

#### Side switching does not equate to speaking from nowhere or divesting yourself of social background—our argument is that if your only exposure to the topic is finding ways to critique or avoid it, then you become solely capable of preaching to the choir. Debate is unique because it gives opportunities to tactically inhabit other perspectives without enlisting in those causes for the sake of skill development and mutual testing

**Haskell 1990** – history professor at Rice University (May, Thomas, History and Theory, 29.2, “Objectivity is Not Neutrality: Rhetoric vs. Practice in Peter Novick’s That Noble Dream”, p. 129-157)

Detachment functions in this manner **not by draining** us of **passion,** but by helping to **channel** our intellectual passions in such a way as **to insure collision** with rival perspectives. In that collision, if anywhere, our thinking transcends both the idiosyncratic and the conventional. Detachment both socializes and deparochializes the work of intellect; it is the quality that fits an individual to participate fruitfully in what is essentially a communal enterprise. Objectivity is so much a product of social arrangements that individuals and particular opinions scarcely deserve to be called objective, yet the social arrangements that foster objectivity have no basis for existence apart from individual striving for detachment. Only insofar as the members of the community are disposed to set aside the perspective that comes most spontaneously to them, and strive to see things in a detached light, is there any likelihood that they will engage with one another mentally and provoke one another through mutual criticism to the most complete, least idiosyncratic, view that humans are capable of. When the ascetic effort at detachment fails, as it often does, **we "talk past one another**," producing nothing but discordant soliloquies, each fancying itself the voice of reason. The kind of thinking I would call objective leads only a fugitive existence outside of communities that enjoy a high degree of independence from the state and other external powers, and which are dedicated internally not only to detachment, but also to intense mutual criticism and to the protection of dissenting positions against the perpetual threat of majority tyranny. Some hypothetical examples may clarify what I mean by objective thinking and show how remote it is from neutrality. Consider an extreme case: the person who, although capable of detachment, suspends his or her own perceptions of the world not in the expectation of gaining a broader perspective, but only in order **to learn how opponents think** so as to demolish their arguments more effectively - who is, in\* short, a polemicist, deeply and fixedly committed as a lifelong project to a particular political or cultural or moral program. Anyone choosing such a life obviously risks being thought boorish or provincial, but insofar as such a person successfully enters into the thinking of his or her rivals and produces arguments potentially compelling not only to those who already share the same views, but to outsiders as well, I see no reason to withhold the laurel of objectivity. 10 There is nothing objective about hurling imprecations at apostates or catechizing the faithful, but as long as the polemicist truly engages the thinking of the enemy he or she is being as objective as anyone. In contrast, the person too enamored of his or her own interpretation of things seriously and sympathetically **to entertain alternatives, even for the sake of learning** how best to defeat them, fails my test of objectivity, no matter how serene and even tempered. The most common failure of objectivity is preaching to the converted, proceeding in a manner that complacently presupposes the pieties of one's own coterie and makes no effort to appreciate or appeal to the perspectives of outsiders. In contrast, the most commonly observed fulfillment of the ideal of objectivity in the historical profession is simply the powerful argument-the text that reveals by its every twist and turn its respectful appreciation of the alternatives it rejects. Such a text attains power precisely because its author has managed to suspend momentarily his or her own perceptions so as to anticipate and take account of objections and alternative constructions -not those of some straw man, but those that truly issue from the rival's position, understood as sensitively and stated as eloquently as the rival him- or herself could desire. Nothing is rhetorically more powerful than this, and nothing, not even capitulation to the rival, could acknowledge any more vividly the force and respectability of the rival's perspective. **To** mount a telling **attack** on **a position, one must first inhabit it**. Those so habituated to their customary intellectual abode that they cannot even explore others can **never be persuasive** to anyone but fellow habitues. That is why powerful arguments are often more faithful to the complexity and fragility of historical interpretation - more faithful even to the irreducible plurality of human perspectives, when that is, in fact, the case -than texts that abjure position-taking altogether and ostentatiously wallow in displays of "reflexivity" and "undecidability." The powerful argument is the highest fruit of the kind of thinking I would call objective, and in it **neutrality plays no part**. Authentic objectivity has simply nothing to do with the television newscaster's mechanical gesture of allocating the same number of seconds to both sides of a question, or editorially splitting the difference between them, irrespective of their perceived merits

#### Moral purism about institutional approaches dooms the aff—hierarchy should be deployed tactically for greater overall gains

**Grossberg, 92** [Lawrence, Morris Davis Professor of Communication Studies at the University of North Carolina at Chapel Hill, “We Gotta Get Out of this Place: Popular Conservatism and Postmodern Culture”, page 388-389 //liam ]

﻿The demand for moral and ideological purity often results in the rejection of any hierarchy or organization. The question-can the master's tools be used to tear down the master's house?-ignores both the contingency of the relation between such tools and the master's power and, even more importantly, the fact that there may be no other tools

available. Institutionalization is seen as a repressive impurity within the body politic rather than as a strategic and tactical, even empowering, necessity. It sometimes seems as if every progressive organization is condemned to recapitulate the same arguments and crisis, often leading to their collapse. 54 For example, Minkowitz has described a crisis in Act Up over the need for efficiency and organization, professionalization and even hierarchy,55 as if these inherently contradicted its commitment to democracy. This is particularly unfortunate since Act Up, whatever its limitations, has proven itself an effective and imaginative political strategist. The problems are obviously magnified with success, as membership, finances and activities grow. This refusal of efficient operation and the moment of organization is intimately connected with the Left's appropriation and privileging of the local (as the site of democracy and resistance). This is yet another reason why structures of alliance are inadequate, since they often assume that an effective movement can be organized and sustained without such structuring. The Left needs to recognize the necessity of institutionalization and of systems of hierarchy, without falling back into its own authoritarianism. It needs to find reasonably democratic structures of institutionalization, even if they are impure and compromised.

#### Refusal of the state empowers its worst aspects. You don’t have to be a technocrat but you should be anti-anti-state

**Barbrook, 97 –** professor at the Hypermedia Research Centre at the University of Westminster (Richard, http://www.nettime.org/Lists-Archives/nettime-l-9706/msg00034.html)

I thought that this position is clear from my remarks about the ultra-left posturing of the 'zero-work' demand. In Europe, we have real social problems of deprivation and poverty which, in part, can only be solved by state action. This does not make me a statist, but rather an anti-anti-statist. By opposing such intervention because they are carried out by the state, anarchists are tacitly lining up with the neo-liberals. Even worse, refusing even to vote for the left, they acquiese to rule by neo-liberal parties. I deeply admire direct action movements. I was a radio pirate and we provide server space for anti-roads and environmental movements. However, this doesn't mean that I support political abstentionism or, even worse, the mystical nonsense produced by Hakim Bey. It is great for artists and others to adopt a marginality as a life style choice, but most of the people who are economically and socially marginalised were never given any choice. They are excluded from society as a result of deliberate policies of deregulation, privatisation and welfare cutbacks carried out by neo-liberal governments. During the '70s, I was a pro-situ punk rocker until Thatcher got elected. Then we learnt the hard way that voting did change things and lots of people suffered if state power was withdrawn from certain areas of our life, such as welfare and employment. Anarchism can be a fun artistic pose. However, human suffering is not.

# r6 aff v. dartmouth er

## 2ac

### 2ac heg

#### Heg sustainable

**Brooks and Wohlforth, 09** - \* Associate Professor of Government at Dartmouth College AND \*\* Professor of Government and Chair of the Department of Government at Dartmouth College (Stephen and William, Foreign Affairs, “Reshaping the World Order,” March/April, proquest)

Only a few years ago, pundits were absorbed in debates about American "empire." Now, the conventional wisdom is that the world is rapidly approaching the end of the unipolar system with the United States as the sole superpower. A dispassionate look at the facts shows that this view understates U.S. power as much as recent talk of empire exaggerated it. That the United States weighs more on the traditional scales of world power than has any other state in modern history is as true now as it was when the commentator Charles Krauthammer proclaimed the advent of a "unipolar moment" in these pages nearly two decades ago. The United States continues to account for about half the world's defense spending and one-quarter of its economic output. Some of the reasons for bearishness concern public policy problems that can be fixed (expensive health care in the United States, for example), whereas many of the reasons for bullishness are more fundamental (such as the greater demographic challenges faced by the United States' potential rivals).

#### Concedes heg is key to solve great power war

**Monteiro 11** \*Nuno P. Monteiro is Assistant Professor of Political Science at Yale University [<http://www.mitpressjournals.org/doi/pdf/10.1162/ISEC_a_00064>, “Unrest Assured: Why Unipolarity is not Peaceful”]

In addition, Wohlforth claims that wars among major powers are unlikely, because the unipole will prevent conflict from erupting among important states. He writes, “The sole pole’s power advantages matter only to the degree that it is engaged, and it is most likely to be engaged in politics among the other major powers. 44 **I agree** that if the unipole were to pursue a strategy of defensive dominance, major power wars would be unlikely. Yet, there is no compelling reason to expect that it will always follow such a course. Should the unipole decide to disengage, as Wohlforth implies, **major power wars would be possible**

**Heg solves proliferation – liberalism and security umbrella**

**Deudney et. al2011** (Daniel is associate professor of Political Science at John’s Hopkins University. Edited by Michael Mastanduno, Professor of Government and Dean of Faculty at Dartmouth College, and G. John Ikenberry, Professor of Politics and International Affairs at Princeton University, William Wolforth, the Daniel Webster Professor at Dartmouth College, where he teaches in the Department of Government, “Unipolarity and nuclear weapons” *International Relations Theory and the Consequences of Unipolarity* pg. 305) BW

The diffusion of nuclear weapons in the international system is significantly entangled with the role of the unipolar hegemonic state. The existence of a unipolar state playing the role of a liberal hegemon has arguably been a major constraint on the rate and extent of proliferation. The extended military alliance system of the United States has been a major reason why many potentially nuclear states have forgone acquisition. Starting with Germany and Japan, and extending to a long list of European and East Asian states, the American alliances are widely understood to provide a “nuclear umbrella.” Overall, without such a state playing this role, proliferation would likely have been much more extensive.

The liberal features of the American hegemonic sate also have contributed to constrain the rate and extent of proliferation. American leadership, and the general liberal internationalist vision of law-governed cooperative international politics, both enabled and infuses the non-proliferation regime. Similarly, the robust and inclusive liberal world trading system that has been a distinctive and salient feature of the American liberal hegemonic system offers integrating states paths to secure themselves that make nuclear acquisition less attractive.

**Heg solves china war**

Thayer, 6 [Bradley A., Assistant Professor of Political Science at the University of Minnesota, Duluth, The National Interest, November -December, “In Defense of Primacy”, lexis]

They are the "Gang of Five": China, Cuba, Iran, North Korea and Venezuela. Of course, countries like India, for example, do not agree with all policy choices made by the United States, such as toward Iran, but New Delhi is friendly to Washington. Only the "Gang of Five" may be expected to consistently resist the agenda and actions of the United States. China is clearly the most important of these states because it is a rising great power. But even Beijing is intimidated by the United States and refrains from openly challenging U.S. power. China proclaims that it will, if necessary, resort to other mechanisms of challenging the United States, including asymmetric strategies such as targeting communication and intelligence satellites upon which the United States depends. **But China may not be confident those strategies would work**, and so it is likely to refrain from testing the United States directly for the foreseeable future because China's power benefits, as we shall see, from the international order U.S. primacy creates.

### 2ac solvency

#### Even with adverse selection or moral hazards imposed by loan guarantees, comprehensive studies show it’s the only way o garner investment

**Congressional Budget Office 11** [“Federal Loan Guarantees for the Construction of Nuclear Power Plants, august 3, 2011, khirn]

Among the goals often posited for federal energy policy are to enhance energy security by diminishing the nation's reliance on foreign oil, to meet a growing demand for electricity, and to reduce greenhouse gas emissions by encouraging investment in clean energy production and technologies. To help further such objectives, the Energy Policy Act of 2005 (Public Law 109-58) established incentives to encourage private investment in innovative technologies, including advanced nuclear energy facilities. Much of the support for such investment is provided under title XVII of that legislation, which offers federal loan guarantees for the construction of nuclear power plants and other types of "alternative" energy facilities. Administered by the Department of Energy (DOE), the loan guarantee program encourages private investment in nuclear energy by lowering the cost of borrowing and possibly increasing the availability of credit for project sponsors—usually an individual utility, a consortium of utilities, or a merchant power producer. In exchange for providing a loan guarantee, DOE is authorized to charge sponsors a fee that is meant to recover the guarantee's estimated budgetary cost. However, budgetary cost estimates—which are calculated as required under the Federal Credit Reform Act of 1990 (FCRA)—are not a comprehensive measure of the cost to taxpayers of those guarantee commitments. Specifically, FCRA estimates do not recognize that the government's assumption of financial risk has costs for taxpayers that exceed the average amount of losses that would be expected from defaults; those additional costs arise because a borrower is most likely to default on a loan and fail to make the promised payments of principal and interest during times of economic stress, when the losses are especially painful for taxpayers. Consequently, the estimated budgetary cost of a guarantee is generally lower than its estimated "fair-value" cost, which approximates the market price that a private guarantor would charge for an obligation with similar risk and expected returns. Because budgetary cost estimates are not a comprehensive measure of the taxpayer resources committed, and because of concerns about the accuracy of the methods and assumptions that DOE uses to forecast default rates and recovery values, some commentators have suggested that federal loan guarantees for the construction of nuclear power plants are being systematically underpriced, whereas others believe they are being overpriced. For this study, the Congressional Budget Office (CBO) reviewed the many factors that can influence the cost to the government of guaranteeing loans for the construction of advanced nuclear facilities; developed a model to estimate guarantee costs for a representative loan using both FCRA-based and fair-value methodologies; performed a sensitivity analysis of those estimated costs to changes in assumptions about key drivers of cost; and explored the challenges inherent in attempting to charge borrowers the full cost of a loan guarantee. CBO's findings are as follows: The expected cost to the federal government of guaranteeing a nuclear construction loan will vary greatly depending on a project's characteristics and on the economic and regulatory environment in which the project will operate. Important considerations include capital structure (the mix of debt and equity used to finance the project); ownership structure (whether it is a stand-alone project or part of a diversified company); whether construction costs may be passed on to utility ratepayers or local taxpayers; the regulatory environment; the degree of uncertainty about construction costs; the cost of competing generation technologies; and the demand for electricity. Although a serious nuclear accident could entail extremely large costs to investors and society, that risk has a small effect on the direct cost to the government of providing a guarantee because liability under the guarantee is limited to the amount of the debt, and the probability that such an accident will occur is low. Default rates and recovery rates are likely to vary considerably, both across projects and over the lifetime of a given project. CBO does not have enough information to independently estimate an average recovery rate for nuclear construction loans. However, assigning a similar expected recovery rate as a starting point for all projects—which is DOE's current practice—does not appear to make full use of the information available to DOE through its detailed project assessment process. For example, when sponsors of stand-alone projects cannot pass on construction costs to rate-payers, very low recoveries may result if bankruptcy occurs during the construction phase. By contrast, recovery rates may be considerably higher once projects become operational. Using a single recovery rate tends to increase the variability of estimated guarantee costs relative to their true values, which increases the government's exposure to a phenomenon known as adverse selection. Adverse selection occurs when borrowers are better able than the government to assess the value of a guarantee offer and take advantage of their superior information at the government's expense. For nuclear construction loans, borrowers will tend to turn down a guarantee if they believe the fee set by DOE is too high but go forward if they consider it fair or underpriced, which increases the likelihood that DOE's portfolio will include more projects for which the subsidy fee has been underestimated than overestimated. When credit ratings are used to assess default probabilities, cost estimates will vary widely with the assigned ratings category, the assumed recovery rate, and whether Treasury interest rates or estimated market interest rates are used for discounting. CBO relied on the information in historical credit ratings to impute default probabilities (as does DOE) and considered a range of recovery rates that might apply to different projects depending on their characteristics. As required under FCRA, budgetary estimates use Treasury interest rates for discounting future cash flows; fair-value estimates rely on estimates of the applicable market interest rates for discounting. Budgetary estimates of guarantee costs are significantly lower than the corresponding fair-value estimates, which provide a more comprehensive measure of the cost to taxpayers. CBO used the credit rating associated with a project to derive the discount rate the market would most likely assign to the loan cash flows. For example, if the risks associated with a guaranteed loan are in the range of those posed by bonds rated A (less risky) and bonds rated BB (riskier), and if 55 percent of the amount owed is expected to be recovered in the event of a default, the budgetary cost, measured on a FCRA basis, ranges from 1 percent to 6 percent of the principal loaned. In contrast, the fair value of the guarantee ranges from 9 percent to 21 percent of the principal loaned. Because of the high degree of uncertainty involved, it may not be possible to charge borrowers the full cost of a loan guarantee. When adverse selection is severe, attempts to offset expected lo**sses with an increase in fees can backfire because the higher fees drive away creditworthy borrowers**, **making it impossible to provide a loan guarantee that does not involve a subsidy.** CBO relied on a credit-ratings-based approach to evaluate the probability of default rather than on the historical experience of the nuclear industry, for which not enough data exist to draw quantitative inferences. However, historical experience suggests that investing in nuclear generating capacity engenders considerable risk. One study found that of the 117 privately owned plants in the United States that were started in the 1960s and 1970s and for which data were available, 48 were canceled, and almost all of them experienced significant cost overruns. As a consequence, most of the utilities that undertook nuclear projects suffered ratings downgrades—sometimes several downgrades—during the construction phase.

### 2ac kritik

#### Framework – the k needs to prove the whole plan is bad --- key to take the plan out of the hands of technocratic elites

**Kuzemko 12** [Caroline Kuzemko, CSGR University of Warwick, Security, the State and Political Agency: Putting ‘Politics’ back into UK Energy, <http://www.psa.ac.uk/journals/pdf/5/2012/381_61.pdf>]

Both Hay (2007) and Flinders and Buller (2006) suggest that there are other forms that depoliticisation can take, or in the terminology of Flinders and Buller ‘tactics’ which politicians can pursue in order to move a policy field to a more indirect governing relationship (Flinders and Buller 2006: 296). For the purposes of understanding the depoliticisation of UK energy policy, however, two of Colin Hay’s forms of depoliticisation are most useful: the ‘… offloading of areas of formal political responsibility to the market…’ and the passing of policymaking responsibility to quasipublic, or independent, authorities (Hay 2007: 82-3). 1 What each of these forms of depoliticisation has in common is the degree to which they can serve, over time, to reduce political capacity by removing processes of deliberation and contestation, thereby reducing the ability for informed agency and choice. In that politics can be understood as being inclusive of processes of deliberation, contestation, informed agency and collective choice the lack of deliberation and capacity for informed agency would result in sub-optimal politics (Hay 2007: 67; cf. Gamble 2000; Wood 2011; Jenkins 2011). There seems little doubt that, with regard to energy as a policy area, the principal of establishing a more indirect governing system had become accepted by UK political elites. One of the very few close observers of UK energy policy from the 1980s to early 2000s claims that both Conservative and New Labour politicians had actively sought to remove energy from politics, making it an ‘economic’ subject: From the early 1980s, British energy policy, and its associated regulatory regime, was designed to transform a state-owned and directed sector into a normal commodity market. Competition and 1 "These"forms"are"referred"to"elsewhere"by"the"author"as"‘marketised’"and"‘technocratic’"depoliticisation"(Kuzemko" 2012b:").liberalization would, its architects hoped, take energy out of the political arena… Labour shared this vision and hoped that energy would drop off the political agenda…. (Helm 2003: 386) 2 As already suggested this paper considers the intention to depoliticise energy to have been reasonably successful. By the early 2000s the Energy Ministry had been disbanded, there was little or no formal Parliamentary debate, energy was not represented at Cabinet level, responsibility for the supply of energy had been passed to the markets, it was regulated by an independent body, and the (cf. Kuzemko 2012b). Furthermore, the newly formed Energy Directorate within the Department of Trade and Industry (DTI), which now had responsibility for energy policy, had no specific energy mandates but instead mandates regarding encouraging the right conditions for business with an emphasis on competition (Helm et al 1989: 55; cf. Kuzemko 2012b: 107). As feared by various analysts who write about depoliticisation as a sub-optimal form of politics, these processes of depoliticisation had arguably resulted in a lack of deliberation about energy and its governance outside of narrow technocratic elite circles. Within these circles energy systems were modelled, language was specific and often unintelligible to others, including generalist politicians or wider publics, and this did, indeed, further encourage a high degree of disengagement with the subject (cf. Kern 2010; Kuzemko 2012b; Stern 1987). Technical language and hiring practices that emphasised certain forms of economic education further isolated elite technocratic circles from political contestation and other forms of knowledge about energy. Arguably, by placing those actors who have been elected to represent the national collective interest at one remove from processes of energy governance the result was a lack of formal political capacity in this policy field. It is worth, briefly, at this point reiterating the paradoxical nature of depoliticisation. Whilst decisions to depoliticise are deeply political, political capacity to deliberate, contest and act in an issue area can be reduced through these processes. Depoliticisation has been an ongoing form of governing throughout the 20 th century it may (Burnham 2001: 464), however, be particularly powerful and more difficult to reverse when underpinned by increasingly dominant ideas about how best to govern. For example Hay, in looking for the domestic sources of depoliticisation in the 1980s and 1990s, suggests that these processes were firmly underpinned by neoliberal and public choice ideas not only about the role of the state but also about the ability for political actors to make sound decisions relating, in particular, to economic governance (Hay 2007: 95-99). Given the degree to which such ideas were held increasingly to be legitimate over this time period depoliticisation was, arguably, genuinely understood by many as a process that would result in better governance (Interviews 1, 2, 3, 15 cf. Hay 2007: 94; Kern 2010). This to a certain extent makes decisions to depoliticise appear both less instrumental but also harder to reverse given the degree to which such ideas become further entrenched via processes of depoliticisation (cf. Kuzemko 2012b: 61-66; Wood 2011: 7).

#### Permutation do the plan and reject the Aff’s endorsement of economic competition

#### Sustainable electricity access is key to stable population and resource competition

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Over a billion people have no access to electricity, a key to economic development and a lifestyle in which women have chore- free time, are educated, work, gain independence, and make their own decisions about reproduction. Providing developing nations with affordable energy can help them reach such goals. Even rapidly developing nations such as India and South Africa can not provide full time electricity. The world’s prosperous nations generally have a sustainable or diminishing populations. A sustainable population reduces natural resources competition and causes for war.

#### Overall global violence is decreasing because of US hegemony

**Barnett, 9/19/11 -** chief analyst at Wikistrat (Thomas, World Politics Review, “The New Rules: Credit the U.S., Not the U.N., for More Peaceful World,” http://www.worldpoliticsreview.com/articles/10047/the-new-rules-credit-the-u-s-not-the-u-n-for-more-peaceful-world)

Thanks to the Sept. 11 terrorist attacks and the wars they spawned, many people around the world think they're living through the most dangerous, violent and strategically uncertain period in human history. Well, that simply isn't true, as the most recent Human Security Report from Canada's Simon Fraser University makes clear. Entitled, "The Causes of Peace and the Shrinking Costs of War," the 2009-2010 edition of the annual report marshals a ton of solid data that proves our world is **less violent than ever** and that it has "become far less insecure over the past 20 years."   
The major failing of this otherwise brilliant report is its refusal to give America any credit for this historic shift, which the authors credit to NATO and the United Nations as the "international community" of note. But before addressing that lapse, let me focus on the unabashedly good news.  
First, classic interstate warfare continues to decline. If in the 1950s we suffered an average of 6 to 7 interstate or international wars per year, now we're down to less than one -- despite the number of states in the world having roughly doubled across those six decades. Though the report notes the complete absence of great-power war since 1945, it repeatedly refuses to adequately credit nuclear weapons on that score. War, the "eternal scourge," apparently went the way of the dinosaur once America achieved nuclear superpower status and exerted itself globally, but the report pretends it was all the U.N.'s doing -- kind of like crediting the referee with winning the game.  
Second, since the Cold War ended, civil wars have started dropping in frequency as well, with the worst ones -- 1,000 or more dead in a year -- declining by more than two-thirds. So not only are there fewer wars, they are less lethal. The average international war of the 1950s killed 20,000 people a year. Today, that number stands at less than 3,000. Not bad for a world allegedly suffering "uncontrollable" WMD proliferation and "perpetual war."  
Third, the biggest theater of warfare and killing since World War II has been Asia. Initially, there was China's civil war and Mao's murderous rule, then the Korean bloodletting followed by Vietnam, where 300,000 died in 1972 alone. But in 2008, the region suffered less than 1,000 "battle deaths." The report's tentative academic judgment here confirms what any historian of modern globalization knows as fact: "East Asia's post-Vietnam history appears to support claims that rising incomes lead to fewer wars."  
It should come as no surprise that, as East Asia spent the past several decades successfully joining the global economy, warfare disappeared. But how do all these great powers rise simultaneously without turning on each other militarily? Might there have been someextra-regional military Leviathan that provided the "glue" for this unprecedented regional dynamic? Or was this the work of the United Nations?  
Fourth, while the frequency of subnational violence -- whether involving the state or strictly between subnational communities -- has increased by a quarter since 2003, the large bulk of these conflicts are low-intensity, meaning fewer than 1,000 battle deaths in a year. So-called high-intensity conflicts -- more than 3 deaths a day -- have dropped globally in frequency by almost four-fifths since the end of the Cold War. This means that in a world of almost 7 billion people, less than 30,000 people are dying from warfare every year. That puts the global scourge of "perpetual war" on par with male deaths due to lung cancer in India.  
But my personal favorite decline concerns deaths from "one-sided violence," otherwise known as government militaries and/or nonstate armies slaughtering civilians, which were at their lowest in 2008 -- the latest year of record -- since researchers began keeping records in 1989.   
Where has the vast majority of such killing occurred since Cold War's end? Africa.   
Which continent has experienced the greatest recent explosion of globalization connectivity and middle class emergence? That again would be Africa. Judging by Asia's experience over the past 35 years, that's good news.  
Finally, what about the notion that wars are growing longer? Absolutely untrue, according to the report, which notes, "In each decade since the 1970s, the percentage of conflicts that lasted 10 years or more has declined."   
Again, the dominant global trend since the 1970s has been the stunning expansion of globalization, beginning with Deng Xiaoping's reforms in China. It turns out that this isn't a case of "perpetual war for perpetual peace" after all, as many critics of my unabashedly pro-globalization vision have long alleged. Instead, globalization and America's muscular support for its expansion just so happens to coincide with the greatest reduction in global violence ever seen.

#### Hegemonic strategy inevitable

Calleo, 10 [David P, “American Decline Revisited”, Director European Studies Program and Professor @ SAIS, *Survival*, 52:4, 215 – 227]

The history of the past two decades suggests that adjusting to a plural world is not easy for the United States. As its economic strength is increasingly challenged by relative decline, it clings all the more to its peerless military prowess. As the wars in Iraq and Afghanistan have shown, that overwhelming military power, evolved over the Cold War, is less and less effective. In many respects, America's geopolitical imagination seems frozen in the posture of the Cold War. The lingering pretension to be the dominant power everywhere has encouraged the United States to hazard two unpromising land wars, plus a diffuse and interminable struggle against 'terrorism'. Paying for these wars and the pretensions behind them confirms the United States in a new version of Cold War finance. Once more, unmanageable fiscal problems poison the currency, an old pathology that firmly reinstates the nation on its path to decline. It was the hegemonic Cold War role, after all, that put the United States so out of balance with the rest of the world economy. In its hegemonic Cold War position, the United States found it necessary to run very large deficits and was able to finance them simply by creating and exporting more and more dollars. The consequence is today's restless mass of accumulated global money. Hence, whereas the value of all global financial assets in 1980 was just over 100% of global output, by 2008, even after the worst of the financial implosion, that figure had exploded to just under 300%.25 Much of this is no doubt tied up in the massive but relatively inert holdings of the Chinese and Japanese. But thanks to today's instantaneous electronic transfers, huge sums can be marshalled and deployed on very short notice. It is this excess of volatile money that arguably fuels the world's great recurring bubbles. It can create the semblance of vast real wealth for a time, but can also (with little notice) sow chaos in markets, wipe out savings and dry up credit for real investment. What constitutes a morbid overstretch in the American political economy thus ends up as a threat to the world economy in general. To lead itself and the world into a more secure future the United States must put aside its old, unmeasured geopolitical ambitions paid for by unlimited cheap credit. Instead, the United States needs a more balanced view of its role in history. But America's post-Soviet pundits have, unfortunately, proved more skilful at perpetuating outmoded dreams of past glory than at promoting the more modest visions appropriate to a plural future. One can always hope that newer generations of Americans will find it easier to adjust to pluralist reality. The last administration, however, was not very encouraging in this regard. III What about Barack Obama? So far, his economic policy has shown itself probably more intelligent and certainly more articulate than his predecessor's. His thinking is less hobbled by simple-minded doctrines. It accepts government's inescapable role in regulating markets and providing a durable framework for orderly governance and societal fellowship. To be sure, the Obama administration, following in the path of the Bush administration, has carried short-term counter-cyclical stimulation to a previously unimagined level. Perhaps so radical an expansion of credit is unavoidable under present circumstances. The administration is caught between the need to rebalance by scaling back and the fear that restraint applied now will trigger a severe depression. Obama's chief aide, Rahm Emanuel, is famous for observing: 'Rule one: Never allow a crisis to go to waste. They are opportunities to do big things.'26 So far, Obama's administration has made use of its crisis to promote an unprecedented expansion of welfare spending.27 Much of the spending is doubtless good in itself and certainly serves the administration's strong counter-cyclical purposes. But at some point the need to pass from expansion to stabilisation will presumably be inescapable. Budget cuts will have to be found somewhere, and demographic trends suggest that drastic reductions in civilian welfare spending are unlikely. Elementary prudence might suggest that today's financial crisis is an ideal occasion for America's long-overdue retreat from geopolitical overstretch, a time for bringing America's geopolitical pretensions into harmony with its diminishing foreign possibilities and expanding domestic needs. The opportunities for geopolitical saving appear significant. According to the Congressional Budget Office (CBO), current military plans will require an average military budget of $652bn (in 2010 dollars) each year through 2028. The estimate optimistically assumes only 30,000 troops will be engaged abroad after 2013. As the CBO observes, these projections exceed the peak budgets of the Reagan administration's military build-up of the mid-1980s (about $500bn annually in 2010 dollars). This presumes a military budget consuming 3.5% of GDP through 2020.28 Comparable figures for other nations are troubling: 2.28% for the United Kingdom, 2.35% for France, 2.41% for Russia and 1.36% for China.29 Thus, while the financial crisis has certainly made Americans fear for their economic future, it does not yet seem to have resulted in a more modest view of the country's place in the world, or a more prudent approach to military spending. Instead, an addiction to hegemonic status continues to blight the prospects for sound fiscal policy. Financing the inevitable deficits inexorably turns the dollar into an imperial instrument that threatens the world with inflation.

#### And, no environment impact

**Norberg, 3** (Johan Norberg, Senior Fellow at Cato Institute, “In Defense of Global Capitalism”, p. 223)

It is a mistake, then, to believe that growth automatically ruins the environment. And claims that we would need this or that number of planets for the whole world to attain a Western standard of consumption—those “ecological footprint” calculations—are equally untruthful. Such a claim is usually made by environmentalists, and it is concerned, not so much with emissions and pollution, as with resources running out if everyone were to live as we do in the affluent world. Clearly, certain of the raw materials we use today, in present day quantities, would not suffice for the whole world if everyone consumed the same things. But that information is just about as interesting as if a prosperous Stone Age man were to say that, if everyone attained his level of consumption, there would not be enough stone, salt, and furs to go around. Raw **material consumption is not static**. With more and more people achieving a high level of prosperity, we start looking for ways of using other raw materials. Humanity is constantly improving technology so as to get at raw materials that were previously inaccessible, and we are attaining a level of prosperity that makes this possible. New innovations make it possible for old raw materials to be put to better use and for garbage to be turned into new raw materials. A century and a half ago, oil was just something black and sticky that people preferred not to step in and definitely did not want to find beneath their land. But our interest in finding better energy sources led to methods being devised for using oil, and today it is one of our prime resources. Sand has never been all that exciting or precious, but today it is a vital raw material in the most powerful technology of our age, the computer. In the form of silicon—which makes up a quarter of the earth's crust— it is a key component in computer chips. There is a **simple market mechanism that averts shortages**. If a certain raw material comes to be in short supply, its price goes up. This makes everyone more **interested in economizing** on **that resource**, in finding more of it, in reusing it, and in trying to find substitutes for it.

#### Market competition solves warfare

Gartzke 5—Former associate prof of pol sci, Columbia. Former associate prof of pol sci, USCD. PhD in International Relations, Formal/Quantitative Methods from U Iowa (Erik, “Future Depends on Capitalizing on Capitalist Peace,” 1 October 2005, http://www.cato.org/pub\_display.php?pub\_id=5133,)

With terrorism achieving "global reach" and conflict raging in Africa and the Middle East, you may have missed a startling fact - we are living in remarkably peaceable times. For six decades, developed nations have not fought each other. France and the United States may chafe, but the resulting conflict pitted french fries against "freedom fries," rather than French soldiers against U.S. "freedom fighters." Tony Blair and Jacques Chirac had a nasty spat over the EU, but the English aren't going to storm Calais any time soon. The present peace is unusual. Historically, powerful nations are the most war prone. The conventional wisdom is that democracy fosters peace but this claim fails scrutiny. It is based on statistical studies that show democracies typically don't fight other democracies. Yet, the same studies show that democratic nations go to war about as much as other nations overall. And more recent research makes clear that only the affluent democracies are less likely to fight each other. Poor democracies behave much like non-democracies when it comes to war and lesser forms of conflict. A more powerful explanation is emerging from newer, and older, empirical research - the "capitalist peace." As predicted by Montesquieu, Adam Smith, Norman Angell and others, nations with high levels of economic freedom not only fight each other less, they go to war less often, period. Economic freedom is a measure of the depth of free market institutions or, put another way, of capitalism. The "democratic peace" is a mirage created by the overlap between economic and political freedom. Democracy and economic freedom typically co-exist. Thus, if economic freedom causes peace, then statistically democracy will also appear to cause peace. When democracy and economic freedom are both included in a statistical model, the results reveal that economic freedom is considerably more potent in encouraging peace than democracy, 50 times more potent, in fact, according to my own research. Economic freedom is highly statistically significant (at the one-per-cent level). Democracy does not have a measurable impact, while nations with very low levels of economic freedom are 14 times more prone to conflict than those with very high levels. But, why would free markets cause peace? Capitalism is not only an immense generator of prosperity; it is also a revolutionary source of economic, social and political change. Wealth no longer arises primarily through land or control of natural resources. **New Kind of Wealth** Prosperity in modern societies is created by market competition and the efficient production that arises from it. This new kind of wealth is hard for nations to "steal" through conquest. In days of old, when the English did occasionally storm Calais, nobles dreamed of wealth and power in conquered lands, while visions of booty danced in the heads of peasant soldiers. Victory in war meant new property. In a free market economy, war destroys immense wealth for victor and loser alike. Even if capital stock is restored, efficient production requires property rights and free decisions by market participants that are difficult or impossible to co-ordinate to the victor's advantage. The Iraqi war, despite Iraq's immense oil wealth, will not be a money-maker for the United States. Economic freedom is not a guarantee of peace. Other factors, like ideology or the perceived need for self-defence, can still result in violence. But, where economic freedom has taken hold, it has made war less likely. Research on the capitalist peace has profound implications in today's world. Emerging democracies, which have not stabilized the institutions of economic freedom, appear to be at least as warlike - perhaps more so - than emerging dictatorships. Yet, the United States and other western nations are putting immense resources into democratization even in nations that lack functioning free markets. This is in part based on the faulty premise of a "democratic peace." It may also in part be due to public perception. Everyone approves of democracy, but "capitalism" is often a dirty word. However, in recent decades, an increasing number of people have rediscovered the economic virtues of the "invisible hand" of free markets. We now have an additional benefit of economic freedom - international peace. The actual presence of peace in much of the world sets this era apart from others. The empirical basis for optimistic claims - about either democracy or capitalism - can be tested and refined. The way forward is to capitalize on the capitalist peace, to deepen its roots and extend it to more countries through expanding markets, development, and a common sense of international purpose. The risk today is that faulty analysis and anti-market activists may distract the developed nations from this historic opportunity.

#### Permutation do the plan and reject the Aff’s endorsement of market mechanisms - if the alt can overwhelm status quo market propagation it can overwhelm the link to the plan

#### Neoliberalism is inevitable and sustainable

**Peck 2**—Canada Research Chair in Urban & Regional Political Economy and Professor of Geography, University of British Columbia. Former Honourary Professorial Fellow, School of Environment and Development, University of Manchester. PhD in Geography. AND—Adam Tickell—Professor of Geography, University of Bristol. PhD (Jamie, Neoliberalizing space, Antipode 34 (3): 380-404, AMiles)

In many respects, it would be tempting to conclude with a Ideological reading of neoliberalism, as if it were somehow locked on a course of increasing vulnerability to crisis. Yet this would be both politically complacent and theoretically erroneous. One of the most striking features of the recent history of neoliberalism is its quite remarkable transformative capacity. To a greater extent than many would have predicted, including ourselves, neoliberalism has demonstrated an ability to absorb or displace crisis tendencies, to ride—and capitalize upon—the very economic cycles and localized policy failures that it was complicit in creating, and to erode the foundations upon which generalized or extralocal resistance might be constructed. The transformative potential—and consequent political durability—of neoliberalism has been repeatedly underestimated, and reports of its death correspondingly exaggerated. Although antiglobalization protests have clearly disrupted the functioning of "business as usual" for some sections of the neoliberal elite, the underlying power structures of neoliberalism remain substantially intact. What remains to be seen is how far these acts of resistance, asymmetrical though the power relations clearly are, serve to expose the true character of neoliberalism as a political project. In its own explicit politicization, then, the resistance movement may have the capacity to hold a mirror to the process

#### The alt causes massive transition wars.

Harris 2 (Lee, Atlanta writer, policy review, the intellectual origins of America-bashing, <http://www.hoover.org/publications/policyreview/3458371.html>)

This is the immiserization thesis of Marx. And it is central to revolutionary Marxism, since if capitalism produces no widespread misery, then it also produces no fatal internal contradiction: If everyone is getting better off through capitalism, who will dream of struggling to overthrow it? Only genuine misery on the part of the workers would be sufficient to overturn the whole apparatus of the capitalist state, simply because, as Marx insisted, the capitalist class could not be realistically expected to relinquish control of the state apparatus and, with it, the monopoly of force. In this, Marx was absolutely correct. No capitalist society has ever willingly liquidated itself, and it is utopian to think that any ever will. Therefore, in order to achieve the goal of socialism, nothing short of a complete revolution would do; and this means, in point of fact, a full-fledged civil war not just within one society, but across the globe. Without this catastrophic upheaval, capitalism would remain completely in control of the social order and all socialist schemes would be reduced to pipe dreams.

### 2ac a2 Dartmouth coal disad

#### LFTR solves warming

**Hansen, 08** [heads the NASA Goddard Institute for Space Studies in New York City, a part of the Goddard Space Flight Center in Greenbelt, Maryland. He has held this position since 1981Letter to Obama, <http://www.columbia.edu/~jeh1/mailings/2008/20081121_Obama.pdf>]

The Liquid-Fluoride Thorium Reactor (LFTR) is a thorium reactor concept that uses a chemically-stable fluoride salt for the medium in which nuclear reactions take place. This fuel form yields flexibility of operation and eliminates the need to fabricate fuel elements. 7 This feature solves most concerns that have prevented thorium from being used in solidfueled reactors. The fluid fuel in LFTR is also easy to process and to separate useful fission products, both stable and radioactive. LFTR also has the potential to destroy existing nuclear waste, albeit with less efficiency than in a fast reactor such as IFR. Both IFR and LFTR operate at low pressure and high temperatures, unlike today’s LWR’s. Operation at low pressures alleviates much of the accident risk with LWR. Higher temperatures enable more of the reactor heat to be converted to electricity (40% in IFR, 50% in LFTR vs 35% in LWR). Both IFR and LFTR have the potential to be air-cooled and to use waste heat for desalinating water. Both IFR and LFTR are 100-300 times more fuel efficient than LWRs. In addition to solving the nuclear waste problem, they can operate for several centuries using only uranium and thorium that has already been mined. Thus they eliminate the criticism that mining for nuclear fuel will use fossil fuels and add to the greenhouse effect. The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. That is a safe assumption under ‘business-as-usual”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables? China and India have strong incentives to achieve pollution-free skies as well as avert dangerous climate change. The United States, even if efficiency and renewables can satisfy its energy needs (considered unlikely be many energy experts), needs to deal with its large piles of nuclear waste, which have lifetime exceeding 10,000 years. Development of the first large 4th generation nuclear plants may proceed most rapidly if carried out in China or India (or South Korea, which has a significant R&D program), with the full technical cooperation of the United States and/or Europe. Such cooperation would make it much easier to achieve agreements for reducing greenhouse gases. Implications. We have already overshot the safe level of greenhouse gases. Things are beginning to crumble – Arctic ice is melting, methane is bubbling from permafrost, mountain glaciers are disappearing. We must move onto a different course within the next few years to avoid committing the planet to accelerating climate changes out ofour control.The time has passed for ‘goals’, half-measures, greenwashing, and compromises with special interests.

#### No lashout – CCP knows it would be suicide and PLA wouldn’t support it

Bruce Gilley, former contributing editor at the Far Eastern Economic Review, M.A. Oxford, 2004

China’s Democratic Future, p. 114

**Yet** the risks, even to a dying regime, may be too high. An unprovoked attack on Taiwan would almost certainly bring the U.S. and its allies to the island's rescue. Those forces **would not stop at Taiwan but** might march on Beijing and oust the CCP, or attempt to do so through stiff sanctions, callingit a threat to regional and world peace**. Such** an attack might also face the opposition of the peoples of Fujian,who would be expected to provide logis­tical support and possibly bear the worst burdens of war. They, like much of coastal China, look to Taiwan for investment and culture and have a close affinity with the island. As a result, there are doubts about whether such a plan could be put into action.A failed war would prompt a Taiwan declaration of independence and a further backlash against the CCP at home**,** just as the May Fourth students of 1919 berated the Republican government for weakness in the face of foreign powers. Failed wars brought down authoritarian regimes in Greece and Por­tugal in 1974 and in Argentina in 1983. Even if CCP leaders wanted war, it is unlikely that the PLA would oblige. Top officers would see the disastrous implications of attacking Taiwan.Mili­tary caution would also guard against the **even** wilder scenario of the use of nuclear weaponsagainst Japan or the U.S.47 At the height of the Tiananmen protests it appears there was consideration given to the use of nuclear weapons in case the battle to suppress the protestors drew in outside countries.48 But even then, thethreats did not appear to gain even minimal support. In an atmosphere in which the military is thinking about its future, the resort to nuclear confrontation would not make sense.

#### Domestic demand decreases now

WSJ, 9/27/12 [“Chinese Slowdown Idles U.S. Coal Mines “http://online.wsj.com/article/SB10000872396390443890304578010472748244256.html]

While many have blamed the downturn in the U.S. coal industry on cheap natural gas supplanting coal and tougher environmental regulations, the slide in metallurgical coal demand has been equally devastating. Coal companies were caught flat-footed after ramping up production last year with the expectation that steep prices would cover their rising costs, despite coal's past cyclicality. Instead, demand in China began to falter just as Australian metallurgical coal production—interrupted by floods last year—surged back into the market.

**And, proves the link is historically denied**

Gulf News, 10/2/12 [“Rising US coal exports threaten Montana ranchers”http://gulfnews.com/business/features/rising-us-coal-exports-threaten-montana-ranchers-1.1079929]

Once the undisputed king in electricity generation, coal has seen its share of the US market drop sharply in recent years. Domestic demand for the fuel has fallen by about a third since its peak in 2007 as the US relies more heavily on cheap, natural gas. With more coal plants closing because of rising costs and tighter regulations — including the announcement that a 154-megawatt plant south of Bull Mountain in Billings would be mothballed — the prospects of coal reclaiming its historical throne are doubtful.¶ ‘Bleak outlook’¶ Analyst Jonny Sultoon with energy consultant Wood Mackenzie described the outlook for burning coal in the US as “pretty bleak.”¶ Backing the industry are the railways that ship coal, unions that want more mining, shipping and construction work, and lawmakers from both sides of the aisle who see political advantage in joining the push for jobs. Pfister is among only about 40 ranchers and others make up the Bull Mountain Land Alliance that has opposed Signal Peak. That compares to more than 300 jobs created since the mine re-opened.

#### And, India thumps the DA

Grinzo, 9/27/12 [Is Coal Still King?, The Energy Collective, <http://theenergycollective.com/lougrinzo/117226/killer-coal-still-king>]

India is poised to contend with China as the globe’s top consumer of coal, with 455 power plants preparing to come online, a prominent environmental research group has concluded.¶ The coal plants in India’s pipeline — almost 100 more than China is preparing to build — would deliver 519,396 megawatts of installed generating capacity. That is only slightly less than pending new capacity in China, which remains the undisputed king of coal consumption.¶ …¶ The research found 1,231 new coal plants with a total installed capacity of more than 1.4 million MW proposed worldwide. Beyond the biggest users — China, India and the United States — the assessment finds a heavy coal demand building up in Russia, Vietnam, Turkey and South Africa. The United States, with 79 coal plants in the pipeline, ranks fourth in this category.¶ Wow, that sounds like a lot of new coal-fired electricity, doesn’t it? Yes, it is, and the numbers are even more unsettling than one might surmise…¶ To provide a broad basis for comparison, let’s look at the US electricity sector[1] and extrapolate from there. In 2010, the US electric power sector had an installed capacity, a.k.a. a “nameplate capacity”, of [342,296 MW for coal-fired generation](http://www.eia.gov/electricity/annual/html/table1.2.cfm), which produced [1,799 billion kWh of electricity](http://www.eia.gov/totalenergy/data/annual/showtext.cfm?t=ptb0802a), consumed [971,322,000 short tons of coal](http://www.eia.gov/totalenergy/data/annual/showtext.cfm?t=ptb0805a), emitted [1,828 million metric tons of CO2](http://www.eia.gov/totalenergy/data/annual/showtext.cfm?t=ptb1103e), and (based on less recent data) [required the withdrawal of 25 gallons of water for each kWh generated](http://www.sandia.gov/energy-water/nexus_overview.htm), or a total of about 45 trillion gallons of water.¶ The planned coal-fired electricity generation has a nameplate capacity of over 1.4 million MW, or 4.1 times the total existing US capacity as of 2010.¶ Scaling up the US numbers to the size of the planned additions (by multiplying by 4.1) gives us yearly figures of 7,376 billion kWh of electricity generated, 4 billion short tons of coal consumed, 7,495 million metric tons of CO2 emitted, and 185 trillion gallons of water withdrawn, all yearly figures.¶ Worldwide CO2 emissions are [34 billion metric tons per year](http://www.pbl.nl/en/publications/2012/trends-in-global-co2-emissions-2012-report), which means this additional generating capacity will add 22% to current worldwide yearly emissions, which are, to put it mildly, far too high. It’s also about 130% of the US’ total CO2 emissions for 2010 from all sources and sectors, not just coal and not just electricity, which were about [5,700 million metric tons](http://www.epa.gov/climatechange/ghgemissions/gases.html).¶ Assuming an average lifespan of 50 years for the individual coal plants, we have a grand(iose) total of 200 billion short tons of coal consumed, 374,750 million metric tons of CO2 emitted, and 9,250 trillion gallons of water withdrawn. That emissions total will push up the atmospheric CO2 level (very) roughly 23 parts per million higher than it would be in the absence of these new plants.[2]¶ Given that some of the new power plants will certainly be in service longer than 50 years, and none of them are built yet, this means we’ll be emitting CO2 from some of these plants well beyond the year 2060, surely into the 2080′s.¶ Once again, let me stress that this is additional coal consumption, water withdrawal, and CO2 emissions, on top of the consumption and emissions associated with other electricity generation, transportation, building energy use, etc. And I haven’t even touched on non-CO2 issues, like methane emissions and landscape destruction from coal mining, and mercury pollution.¶ And, of course, there’s the least convenient truth of all, that nasty business of CO2′s hideously long atmospheric lifetime, which extends the reach of these new coal plants well into the lifetime of multiple generations of our descendants, unless we can manage a large-scale roll out of an effective carbon recovery technology.¶ This is the point where people leap into the comment section and beat me up for not being realistic. Surely I can’t expect all of that planned coal capacity to be built, they’ll say. And, in fact, I don’t expect it to all be built, but not because we’ll realize what a colossally stupid thing it would be to do that to ourselves and our descendants, but because we’ll run into serious limitations in coal production and water supplies before we can erect all those coal plants and put them into service. What portion of that 1.4 million MW of new coal plants do you think we’ll actually build? Two thirds? Half? Make your guess and scale the numbers I calculated above, and you still get a daunting result.¶ The point of all this back-of-the-envelope (calculator applet?) number crunching, should it not be painfully obvious by now, is that:¶ The planned coal plant additions are a huge story that gets very little attention, even on greenie web sites. Lately we’ve all been transfixed by the Arctic news, which is understandable and likely even a good thing, to the extent that it helped spread the word. But new coal plants are so far off our radar screen that I only knew about the article above because it popped up in one of my Google alerts, and not any of the dozens of sites I track via RSS feeds.¶ The sheer scale of the planned coal plant additions is not just terrifying, but it becomes more terrifying the more you endeavor to put it into context, as I tried to do in this post.¶ These new coal plants, assuming that at least a small portion of them are actually built and run for decades, make our global target of reducing CO2 emissions and thereby, eventually, the atmospheric level of CO2 vastly more difficult. Once again, everything I’ve described above is electricity only, and doesn’t include the rapidly expanding use of private motor vehicles in China and India, for example.¶ If we don’t make a serious, focused, global effort to turn away from coal we’re far more likely to see global annual CO2 emissions rise to 40 or 45 billion metric tons a year from its current level of 34 long before it drops to 30.

### 2ac counterplan

#### The plan is key to self-sufficient forward operating bases

Ackerman, 11 [Spencer, February 18th, Latest Pentagon Brainstorm: Nuke-Powered War Bases, Wired. Com. http://www.wired.com/dangerroom/2011/02/nuke-bases/]

Buried within Darpa’s 2012 budget request under the innocuous name of “Small Rugged Reactor Technologies” is a $10 million proposal to fuel wartime Forward Operating Bases with nuclear power. It springs from an admirable impulse: to reduce the need for troops or contractors to truck down roads littered with bombs to get power onto the base. It’s time, Darpa figures, for a “self-sufficient” FOB.¶ Only one problem. “The only known technology that has potential to address the power needs of the envisioned self-sufficient FOB,” the pitch reads, “is a nuclear-fuel reactor.” Now, bases could mitigate their energy consumption, like the [solar-powered Marine company](http://www.wired.com/dangerroom/2011/01/afghanistans-green-marines-cut-fuel-use-by-90-percent/) in Helmand Province, but that’s not enough of a game-changer for Darpa. Being self-sufficient is the goal; and that requires going nuclear; and that requires … other things.¶ To fit on a FOB, which can be anywhere from Bagram Air Field’s [eight square miles](http://www.wired.com/dangerroom/2010/08/u-s-afghan-mega-base/) to dusty collections of wooden shacks and concertina wire, the reactor would have to be “well below the scale of the smallest reactors that are being developed for domestic energy production,” Darpa acknowledges.¶ That’s not impossible, says Christine Parthemore, an energy expert at the Center for a New American Security. The Japanese and the South Africans have been working on miniature nuclear power plants for the better part of a decade; Bill Gates has [partnered with Toshiba](http://news.bbc.co.uk/2/hi/8582692.stm) to build mini-nuke sites. (Although it’s not the most auspicious sign that one prominent startup for modular reactors [suspended its operations](http://www.greentechmedia.com/articles/read/nuclear-startup-nuscale-suspends-operation/) after growing cash-light last month.) Those small sites typically use uranium enriched to about 2 percent. “It would be really, really difficult to divert the fuel” for a bomb “unless you really knew what you were doing,” Parthemore says.¶ But Darpa doesn’t want to take that chance. Only “non-proliferable fuels (i.e., fuels other than enriched uranium or plutonium) and reactor designs that are fundamentally safe will be required of reactors that may be deployed to regions where hos tile acts may compromise operations.”¶ Sensible, sure. But it limits your options: outside of uranium or plutonium, [thorium](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is the only remaining source for generating nuclear fuel. The Indians and now the Chinese have experimented with thorium for their nuclear programs, but, alas, “no one has ever successfully found a way” to build a functioning thorium reactor, Parthemore says, “in a safe and economical manner.”

Solves effective peacekeeping

Mosher et al., 8 (David E., Senior Policy Analyst @ RAND, Green Warriors: Army Environmental Considerations for Contingency Operations from Planning Through Post-Conflict, RAND)

The environment may also be important during the post-conflict phase of an operation,9 or even before combat operations end. Providing clean water, managing sewage, or providing irrigation water can be important for convincing the local populace to support the U.S. mission and not an insurgency, according to some commanders.10 Although these are not traditional Army missions, they can have an important effect on the outcome of an operation, from both a military and a political perspective. Addressing legacy problems can also help a new government develop legitimacy and can enable U.S. forces to withdraw from the country sooner**.** Indeed, many of the goals of stability operations defined in the 2006 edition of JP 3.0, Joint Operations, can have environmental components. Operational effectiveness can be hampered by poor environmental practices or helped by good ones. Logistics requirements and costs can be reduced by good practices, for instance, applying technologies to reduce operational requirements for petroleum, oil**,** and lubricants (POL) or field water treatment systems, or reducing acute threats to soldier health. Good environmental practices can also reduce the resources that must be diverted to address environmental issues. Commanders may also want to reduce or prevent liabilities, either financial or diplomatic. Good environmental awareness and practices during contingency operations can reduce the financial liabilities the Army and the United States may face. On more than one occasion in recent operations, contractors have removed hazardous wastes from base camps and, without Army knowledge, dumped them along the side of a road or in other inappropriate locations, sometimes to avoid disposing of them properly or to sell the drums that hold the wastes. These actions have created cleanup costs for the Army that are many times higher than the original price of the contract. In other cases, the Army has had to spend large sums to remediate serious preexisting environmental contamination at base camps, expenses that could have been avoided if the base camps had been located elsewhere. Financial liabilities can also arise from claims brought by U.S. soldiers who believe they were exposed to hazardous substances, as the Army’s past experiences with Agent Orange and Gulf War Illness illustrate. 11 Members of the local populace may also bring claims against the Army for environmentally related damage, draining funds that could be more effectively used for reconstruction or stabilization activities. Inadequate attention to environmental issues can also create diplomatic liabilities. Illegal dumping by contractors and poor waste management practices by soldiers have caused immediate diplomatic problems with host nations whose support has been critical. Long-term diplomatic problems from environmental problems can also emerge years after an operation is over. Perhaps most important are the environmental issues that can affect U.S. national objectives, those strategic political and economic objectives that U.S. leaders established when they committed forces to the contingency operation in the first place. One such national objective may be winning and maintaining support of the local populace. Although environmental conditions may be poor and national environmental laws may be weak or nonexistent, our research indicates that locals often care deeply about the environment, which can be critical to their survival, livelihood, and well-being. Vital environmental issues can include access to clean drinking water, effective sewage systems, and viable farmland (see Box 1.1). Restoring or building these basic infrastructures is often essential for the economic and social development necessary for stability. To the extent that such projects improve cooperation with locals, they can lower security risks, improve intel- ligence, and speed reconstruction. National objectives that have environmental components also include preserving natural resources that have important economic value (such as oil fields or fisheries) and even preserving cultural resources that are a matter of national, regional, religious, or cultural pride. If long-term stability of a country is a mission objective, sustainability and the long-term health of nbatural systems, including watersheds, forests, ecosystems, biodiversity, and farmlands, are also important. Local customs and practices can take the place of laws, and therefore military leaders, when designing plans and conducting operations, should understand how the local people interact with their environment. The environmental components of national objectives are often seen as falling outside the normal conception of the military mission. Because they have little to do with combat operations or military objectives, they are often not taken into consideration during the Army’s planning, training, or operations. Yet ignoring these broader political objectives can lead to failure, as Prussian military writer Carl von Clausewitz warned.12 Thus, the environmental dimensions of national objectives should be carefully considered. The manner in which the military conducts its operations can affect environmental outcomes upon which the success of the overall mission may depend. There is some evidence that national objectives such as stabilizing societies after conflict are now being emphasized at the Army’s combat training centers, but the degree to which environmental considerations are included is unclear.

**Global nuclear war**

Dean 95 [Jonathan, former ambassador to NATO, The Bulletin of Atomic Scientists, p. google]

IN ANY EVENT, in a world of interconnecting COMMUNICATIONS AND ENVIRONMENTAL, TRADE, AND FINANCIAL LINKS, the United States, a leading industrial trading country that needs access to raw materials and markets, usually ends up paying in one way or another when a major regional conflict erupts. IN PRACTICAL TERMS, it is impossible for the United States to avoid some degree of involvement when major regional conflicts break out. FOR 200 YEARS, THE UNITED STATES HAS BEEN URGING LIBERTY, FREEDOM, DEMOCRACY, HUMAN RIGHTS, FREE MARKET VALUES, VOLUNTARY MUTUAL AID AND COLLECTIVE SECURITY ON THE OUTSIDE WORLD. THE UNITED STATES IS THE SOLE SURVIVING WORLD-CLASS POWER, WITH MILITARY STRENGTH AND GNP FAR LARGER THAN ANY OTHER COUNTRY. AS A RESULT, when large-scale conflict erupts, the United States cannot avoid being called on for help, as it was in Somalia, Bosnia, Rwanda, and Haiti. For the United States to seek to stand aside or to respond only weakly in such cases is to risk damage to its credibility AND WORLDWIDE INFLUENCE. PRESIDENT CLINTON JUSTIFIED THE NATO BOMBING OF SERBIAN POSITIONS IN BOSNIA AND THE U.S. INVASION OF HAITI BY SAYING THAT THE CREDIBILITY AND RELIABILITY OF THE U.S. WAS AT STAKE, AS IT WAS. IT IS TRUE THAT PAST ADMINISTRATIONS USED SIMILAR ARGUMENTS TO JUSTIFY CONTINUED U.S. INVOLVEMENT IN VIETNAM LONG AFTER IT WOULD HAVE BEEN WISE TO WITHDRAW. NONETHELESS, WHEN THE COLLECTIVE DISAPPOINTMENT OF WORLD OPINION OVER THE BEHAVIOR OF THE UNITED STATES (OR OF ANY MAJOR COUNTRY) BECOMES INTENSE AND ENDURING, IT BEGINS TO UNDERMINE THE INTERNATIONAL PRESTIGE AND STANDING OF THE ENTIRE NATION CONSIDERABLE DIMINUTION OF U.S. STATURE AND INFLUENCE HAS ALREADY TAKEN PLACE OVER THE PAST FOUR OR FIVE YEARS IN CONNECTION WITH FALTERING U.S. POLICIES TOWARD BOSNIA, SOMALIA, AND RWANDA. FORTUNATELY, AMERICANS ARE NOT SPARTANS, ROMANS OR PRUSSIANS-SELF-DISCIPLINED MILITARISTIC PEOPLES WHO CONSIDERED IT A MATTER OF NATIONAL PRIDE NOT TO RECOIL FROM CONFLICT BECAUSE OF CASUALTIES AMONG THEIR FORCES. HOWEVER, IF THE TRENDS CONTINUE THAT UNDERLIE THE PUBLIC OUTRAGE THAT FOLLOWED THE DEATH OF U.S. SERVICEMEN IN SOMALIA, AND U.S. ADMINISTRATIONS CONTINUE TO ABSTAIN FROM PEACEKEEPING ACTIVITIES BECAUSE THEY COULD ENTAIL CASUALTIES, THE UNITED STATES WILL NOT LONG REMAIN A WORLD POWER. If U.S. national prestige declines further under conditions like these, the U.S. capacity to constructively influence the course of events without the use of force will decrease. And when force must be used, the United States may have to use more of it to be effective. EXPERTS THROUGHOUT THE WORLD EXPECT GROWING POPULATION PRESSURES AND INCREASING ENVIRONMENTAL STRESS TO DEVELOP OVER THE COMING DECADES INTO INTENSE, FAR-REACHING SOCIAL UNREST AND REGIONAL CONFLICT. ECONOMIC DEVELOPMENT IS THE SOLUTION, HOWEVER SLOW AND UNCERTAIN IT MAY BE IN COMING. BUT the world also needs effective regional conflict-prevention procedures. Left on its own, regional violence can lead to confrontation and even war between the great powers, including the United States, AS MIGHT OCCUR, FOR EXAMPLE, in the event of conflict between Ukraine and Russia or between China and its neighbors. IN THE FINAL ANALYSIS, unchecked regional violence and the fear of further violence will lead more states to develop nuclear weapons. IN PAST DECADES, this process occurred in Israel, South Africa, India, Pakistan, IRAQ, and PRESUMABLY, IN North Korea. A world with 20 or 30 nuclear weapon states would not only make a more effective global security system impossible, it would lead the present nuclear weapon states to modernize and increase their weapons-and it would markedly increase the vulnerability of the United States to direct attack. Instead of SHRUGGING AT HUMAN FALLIBILITY, accepting war as inevitable, AND REACTING AFTER IT HAPPENS, U.S. policy should aim at establishing an international peacekeeping system that can head off an increasing number of conflicts. CONSEQUENCES IF THIS REASONING IS ACCEPTED, THE ADMINISTRATION SHOULD DECIDE ON AND PUBLICLY DECLARE AN EXPLICIT LONG-TERM POLICY OF JOINING WITH OTHER COUNTRIES IN SEEKING A GRADUAL LOWERING OF THE LEVEL OF ARMED CONFLICT IN THE WORLD THROUGH PREVENTING A GROWING PROPORTION OF POTENTIAL WARS AND CURTAILING WARS WHEN THEY DO OCCUR. This goal would be achieved by building an increasingly effective worldwide network of regional conflict-prevention and peacekeeping organizations headed by a more effective United Nations.

### 2ac Obama Good – Top Level

#### Romney has the same Iran policy as Obama – sanctions first, and the same strike threshold

Stephanopoulos 9/14 (George, 9/14/12, <http://abcnews.go.com/blogs/politics/2012/09/romney-on-iran-share-same-red-line-as-obama/>, RBatra)

Mitt Romney has skewered President Obama’s Iran policy. But in an exclusive interview, days after the Israeli Prime Minister criticized the U.S. for not putting “red lines before Iran,” Romney told me he would draw the same line in the sand as Obama.

“My red line is Iran may not have a nuclear weapon. It is inappropriate for them to have the capacity to terrorize the world. Iran with a nuclear weapon or with fissile material that can be given to Hezbollah or Hamas or others has the potential of not just destabilizing the Middle East. But it could be brought here,” Romney said.

“Look, Iran as a nuclear nation is unacceptable to the United States of America,” he said.

I pointed out that President Obama also says it is unacceptable for Iran to have a nuclear weapon and asked Romney if he therefore has the same “red line” as Obama?

“Yes,” Romney said.

The difference, Romney says, is what he would do to keep Iran from reaching the line.

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“I spoke some years ago in Israel at the Herzliya Conference and laid out seven steps to keep Iran from becoming nuclear. They have not been taken, until one, more recently. I said that crippling sanctions needed to be put in place immediately.”

Had those sanctions been implemented Iran’s economy “would be on its knees at this point,” Romney said.

**No impact to a strike**

**Poor 2/16**—quoting Charles Krauthammer (Jeff, 2/16/12, <http://dailycaller.com/2012/02/16/krauthammer-israeli-strike-on-iran-will-not-cause-a-world-war-video/>, RBatra)

On Wednesday’s “Special Report Online” segment on FoxNews.com, syndicated columnist Charles Krauthammer said that if Israel decides to attack Iran in order to thwart its development of nuclear weapons, the collateral damage wouldn’t start a third world war.

Krauthammer based that hypothesis on Iran not having allies that would be willing to intervene significantly on a military level. (RELATED: More analysis from Charles Krauthammer)

“It could cause a regional war,” Krauthammer said. “It will not cause a world war by any means. It’s not August 1914, because Iran has no great power allies who will intervene militarily. Iran is going to be alone with its clients, Syria, Hezbollah and Hamas — all of whom are on their heels right now.”

He said it would require Iran acting out in an irrational way and luring the United States into engagement for any conflict to become more widespread.

“If Iran is smart, it will not attack the United States in retaliation because that would involve us,” he said. “It would retaliate against Israel and it could remain a limited engagement. Now of course, irrationality is possible and you cannot predict. **If the Iranians either close the Strait of Hormuz or attack Americans at the naval facility in Bahrain, that would be suicide because that would occasion American intervention**, almost like Wilson in the First World War in the sinking of the Lusitania. You don’t do that if you’re rational, but who knows. The Iranians haven’t always been rational.”

#### Obama will win, it’s too late to alter swing state dynamics and most voters have already decided

**Downie, 10/4/12 –** Washington Post Opinion writer, James, Obama lost the first debate, but he will still win the election, Washington Post, http://www.washingtonpost.com/blogs/post-partisan/post/obama-lost-the-first-debate-but-he-will-still-win-the-election/2012/10/04/9c3b7eb8-0deb-11e2-bd1a-b868e65d57eb\_blog.html)

And yet, the president’s supporters would be wrong to wring their hands. Fundamentally, Obama’s loss will not matter. At most, Wednesday night was a case of “too little, too late” for Romney. Yes, the polls will probably move a point or two in Romney’s direction after the first debate. But all the evidence suggests that for Romney, whether or not you believe he should be president, closing the gap and beating Obama is a bridge too far.

Consider the task facing Romney going into Wednesday’s debate: Nationally, RealClearPolitics’s poll average had him down three points; Nate Silver’s model had him down four. He had held a lead in a major poll exactly once since the end of August. The electoral college looked even worse for him: RealClear’s map gave Obama 269 electoral votes safe or leaning to Romney’s 181 (with 88 in toss-up states); HuffPost Pollster gave Obama a 290-191 lead; and Nate Silver’s model had Obama winning an average of 319 electoral votes to Romney’s 218, a comfortable margin. Even Karl Rove had 277 votes safe or leaning to Obama, with another 70 as toss-ups.

“Ah,” you say, “that may be true, but surely the gap is small enough to close? And wouldn’t the first debate be enough to bring this race back to a dead heat?” In a word, no.

Let’s start with the second question. Incumbent presidents almost always have a poor first debate: George W. Bush lost to John Kerry in 2004, for example, and Walter Mondale beat Ronald Reagan so badly in 1984 that there was a spate of articles asking if the incumbent was too old for the presidency. Yet never has a challenger’s strong first debate performance closed as large a national polling gap as Romney faced going into last night’s debate. Furthermore, most post-debate polling bumps come from previously undecided voters, of which there is a historically small amount in this campaign, thus making it even less likely that Romney could exceed past norms. And Romney would need to outdo history by quite a distance — only Harry Truman has come back from a national deficit as large or larger than Romney’s at this point in the campaign.

If Romney would have to pull off a miracle to close the gap in national polling, he has no shot at matching the president in the electoral college. As mentioned above, forecasters commonly predict that Obama already has a big lead of safe and leaning states. If we assume Romney will improve in the polls, there would be around nine “swing states”: Colorado, Florida, Iowa, North Carolina, New Hampshire, Nevada, Ohio, Virginia and Wisconsin. There’s one problem here for Romney: He is trailing, and has been consistently trailing, in all but two — North Carolina, where he’s held a small lead, and Florida, this election’s closest thing to a 50-50 state. Romney doesn’t need to win two out of those nine; in almost every scenario, he will need six or seven out of those nine to win, including at least two or three states where he is behind by several points more than he is nationally.

All of which brings me to the final point: Given the state of the race before last night’s debate, even most Romney backers would agree that a Romney victory would require a flawless campaign the rest of the way from Romney and a blunder or two from Obama. After six years of both these men running for and/or being president of the United States, is there really anyone out there who thinks Mitt Romney can go a month without making a single mistake? Who thinks Barack Obama, who has been playing it safe for at least several months now, will suddenly make a reckless error, as opposed to a merely lackluster performance? (Or, if you’re Sean Hannity and co., do you believe the lamestream media will suddenly forget their liberal bias and stop protecting the president while assaulting Mitt Romney?)

Seriously, does anyone believe that?

The fact is that, come October, presidential elections cannot permanently change course over a few days or hours (unlike, say, media narratives). The majority of voters have already made their decision, and the debates won’t provide enough of a boost to alter the contest’s trajectory. Sadly for Romney, the path the race is stuck on ends with his defeat.

#### Energy won’t switch votes

**Farnam, 12** (T.W. Washington Post, Energy ads flood TV in swing states, 6/27, <http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V_story.html>)

Energy issues don’t spark much excitement among voters, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy.

And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads.

The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry.

Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.”

Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag.

In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway.

When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, fewer than 1 percent mention energy.

#### No Romney traction – even if voters hate Obama’s energy policy they won’t shift to Romney

Lewis, 10/1/12 - senior contributor to The Daily Caller (Matt, The Daily Caller, “Mitt Romney’s struggle to win blue collar Ohio voters”

This sounds trivial, but it matters greatly — especially in places like Ohio.

The Atlantic’s Molly Ball is consistently a “must read,” and her latest column reinforces a point I’ve been making for a long time — that Mitt Romney is in danger of under-performing with working-class whites in key states like the Buckeye state. (Ball’s teaser says it all: “In Appalachian coal country, Romney is now viewed with nearly as much suspicion as Obama — and that may be the story of the 2012 election.”)

There is at least one substantive reason for these voters to be skeptical of Romney. While interviewing Ohio voters, Ball stumbled over an interesting blast from the past:

It turns out Romney, as governor of Massachusetts in 2003, held a press conference in front of a coal-fired power plant. “I will not create jobs or hold jobs that kill people,” he said, and then, gesturing at the facility behind him: “That plant, that plant kills people.” You can see the footage in an Obama campaign ad that’s been airing heavily here. It seems to have made an impression.

The notion that Romney would be worse for coal than Obama seems absurd. Still, Obama is using the line to effectively muddy the waters. All he really needs is for voters to conclude, “they’re both bad,” and Obama can consider that a victory. Ball sums it up thusly,

I heard it over and over again from Ohioans — the idea that Romney stands for the wealthy and not for them. Obama’s depiction of his rival as an out-of-touch rich guy, which has gotten no little assistance from Romney himself, has made a deep and effective impression with these self-consciously working-class voters.

#### And, fiat should be determined by the least restrictive means – congress is holding “pro forma sessions” - NO legislative business can occur in them

Ramsey Cox (writer for The Hill) September 24, 2012 “Congress to hold pro forma sessions until November” http://thehill.com/blogs/floor-action/senate/251313-congress-to-hold-pro-forma-sessions-until-november

Rather than being in recess for more than five weeks, both the Senate and the House decided to hold pro forma sessions until after the November elections. Both chambers will gavel in Tuesday morning for a brief session; typically, legislative business doesn't take place in pro forma sessions. At most members ask to be recognized for a speech, but rarely do. It is unclear if the legislative branch was afraid of recess appointments by the White House, yet both sides took a formal recess in August. The Senate will hold a pro forma session every Tuesday and Friday until Nov. 13 at 2 p.m. when they’ll continue work on S. 3525, the Sportsmen Act, which would increase access to federal land for hunters and fishers while also supporting conservation measures.

#### Jobs report will have a bigger effect than the plan

**Reich, 10/1**/12 - Chancellor’s Professor of Public Policy at the Goldman School of Public Policy at the University of California at Berkeley (Robert, “Bigger than the debates? Friday’s jobs report” Salon,

<http://www.salon.com/2012/10/01/bigger_than_the_debates_fridays_jobs_report/>

The biggest election news this week won’t be who wins the presidential debate Wednesday night. It will be how many new jobs were created in September, announced Friday morning by the Bureau of Labor Statistics.

Rarely in the history has the monthly employment carried so much political significance. If the payroll survey is significantly more than 96,000 –- the number of new jobs created in August — President Obama can credibly claim the job situation is improving. If significantly fewer than 96,000, Mitt Romney has the more credible claim that the economy isn’t improving.

August’s household survey showed the overall rate of unemployment to be 8.1 percent in August – not bad, relative to previous rates – but that was mainly because so many Americans had stopped looking for work. (You’re deemed “unemployed” only if you don’t have a full-time job and you’re looking for work; if you’ve given up looking, you’re not counted.)

What happened to jobs in August or September – and what will happen in October (announced November 2, just days before Election Day) – have very little to do with what Obama did or didn’t do. Presidents have little to do with month-to-month changes in employment.

What’s more, the rest of the world isn’t cooperating: Much of Europe is in recession because it’s swallowed the “austerity” cool-aide. Japan is still a basket case. And China is slowing considerably.

In addition, Obama has had to grapple with a recalcitrant Republican congress, whose “number one goal,” according to Senate Minority Leader Mitch McConnell, hasn’t been to create more jobs but to make sure Obama doesn’t get a second term.

Still, evidence is accumulating that the U.S. economy has stalled. According to Commerce Department data released late last week, the economy grew at an annualized rate of only 1.3 percent between April and June. That’s down from 2 percent in the first quarter of the year. Consumer spending rose in August just .1 percent, after adjusting for inflation. Orders for durable goods (cars, TVs, other long-lasting manufactured products) dropped 13 percent, the biggest monthly drop in three years. And because incomes grew less than spending, the savings rate dropped to 3.7 percent — the lowest since April.

#### Eurozone action will outweigh the plan

**Weisenthal, 9/26**/12 - Prior to joining Business Insider in October 2008, Joe was a correspondent for paidContent.org, as well as the Opening Bell editor at Dealbreaker.com. He previously was a writer and analyst for Techdirt.com, and before that worked as an analyst for money management firm Prentiss Smith & Co (Joe, “We're Getting A Glimpse Of Barack Obama's Worst Nightmare” Business Insider, http://www.businessinsider.com/obamas-worst-nightmare-2012-9#ixzz289W0KygN)

This doesn't necessarily seem likely, but the latest turns and twists of the global economy open up a scenario whereby markets could get really ugly between now and the election.

Basically, we present a plausible scenario in which things get bad on two fronts. The scenario is based on developments over the last several days.

Here's how it could go:

First, Europe really stalls out.

Thanks to the political crisis in Spain, suddenly it's not clear if the ECB's powerful bond buying program will ever get off the ground.

Remember, the ECB has announced a plan to backstop government bonds, but it needs the countries to request aid and submit to outside fiscal supervision. Because of mass protests, and a burgeoning secession movement in Catalonia, Spanish PM Mariano Rajoy is very reluctant to ask for a bailout unless it's absolutely necessary. He'd like to delay the request as long as possible.

In addition, you have heightening squabbles over what will be done with Greece (raising the specter that it will leave the Eurozone). There are more and more reports about HUGE holds in the government's budget, and the various creditor parties are fighting about who will take the hit. The specter of Greece leaving the Eurozone is rising.

This could then start hitting markets in the US. Actually that already seems to be happening. The market's dropping. And now we no longer have an implied "put" from the Fed, since it's already blown its wad (or so it seems) with the announcement of open-ended QE.

Already, the market has been weak since QE3 was announced, and in particular, the oil & gas/basic materials stocks that people associate with reflation have been weak.

Those two sectors, which are supposed to rise on successful reflation, make up 2 out of 3 of the worst performing S&P sectors today.

This could be a nothing blip, but a series of weeks like this one (riots in Europe, which inevitably remind people about government

debt) and markets in the US reacting badly could be the "October Surprise" that Romney needs to win.

#### Too late to change the election- ideology

Helling ’12 (DAVE HELLING, McClatchy Newspapers Miami Herald 7-22-12 "Is the race for president already over?"

But **a growing number** of **political scientists and campaign consultants** - backed by the **latest polling data** - think the daily campaign back-and-forth **is having no significant effect on voters.** Most Americans have **locked in** their presidential decisions, polls released Thursday suggested, and the already small number of persuadable voters **shrinks by the hour**. Put another way: America could vote for president next week, and the outcome would probably be the same as it will be in November. "That's accurate, barring some really big, big event or change in the political environment," said Alan Abramowitz, a political science professor at Emory University in Atlanta, who has studied presidential voting patterns. Kenneth Warren, a political science professor at St. Louis University, agreed. "Most people have decided who they're going to vote for early on," he said. Recent polls show those who have decided are split almost evenly between Obama and Romney. In a CBS/New York Times poll, Romney led by 1 point. In a Fox News poll, he trailed Obama by 4 points. A National Public Radio poll found Obama leading by 2 points. A Gallup tracking poll over the same time period showed the race dead even. The average of polls puts the Obama advantage at 1.2 percent, according to Real Clear Politics, a political aggregation website. The incumbent has led Romney in that average by a one- to two-point margin since last October. Political scientists and consultants said there were several reasons for early presidential decision-making. In an Internet-cable-TV age, **voters are pounded with political messages daily, helping them make up their minds far in advance** of the election. An incumbent in the race makes at least one of the candidates a known quantity. And American **voters are deeply divided, further cementing their choices.**

#### Undecided/swing votes dont pay attention

Ezra Klein http://www.bloomberg.com/news/2012-09-26/why-undecided-voters-won-t-be-deciding-this-election.html 9-26-12

Even though the ad is an exaggeration, it’s not an outright lie. This election will probably be decided by a tiny fraction of the electorate in eight or nine states. The undecided voters in those states are popularly portrayed as people who just can’t make up their minds. But that’s not quite right. They aren’t so much “undecided” as uninterested and, frankly, uninformed; in political-science parlance -- and SNL ads -- they are “low information” voters. It’s worth stopping here to clarify something: “uninformed” does not mean “dumb.” We’re all uninformed about certain topics. You wouldn’t believe how little I know about, say, baseball. I’m vaguely aware that it happens, and that it culminates in a World Series, but I can’t tell you who won last year, or who’s in contention this year. Baseball just isn’t something I pay attention to. Lynn Vavreck, a political scientist at the University of California at Los Angeles, says that uninformed voters have roughly the same relationship to politics that I have to baseball. “They are lower on political information, for sure. That’s a function of being not that interested and not paying attention,” she said. “It’s not that they can’t comprehend the information, or that they’re at a balancing point and can’t decide. They’re just not dialed in. They’re not getting all the information you or I are getting.” Vavreck asked thousands of voters -- both decided and undecided -- a battery of basic, multiple-choice questions about who’s who in politics. The questions were designed to be easy. You didn’t have to know that John Boehner is Speaker of the House. You just had to know he is a congressman rather than a judge or the vice president. According to Vavreck’s polling, only 35 percent of undecided voters could identify Boehner’s job as “congressman.” Only 69 percent could say that Joe Biden is the vice president rather than, say, a representative. Only 17 percent can identify Chief Justice John Roberts as a judge. Decided voters have an easier time rattling off the job titles of Boehner and Biden, as well as those of Harry Reid, Eric Cantor, Mitch McConnell and Nancy Pelosi. (Interestingly, they struggle more than undecideds to identify Roberts.) That’s likely because decided voters are paying more attention to the election. About 43 percent of decided voters say they’re following the presidential election “very closely.” Only 12 percent of undecided voters say the same. Recognizing that undecided voters are mostly uninterested voters helps to clarify the trajectory of the presidential campaign. In their book “The Timeline of Presidential Elections,” Robert Erikson and Christopher Wlezien show that voter preferences tend to be very stable in the fall, but that campaign observers -- the authors analyze people betting money in online political prediction markets -- tend to assume those preferences are far more volatile. Psychological Projection The misjudgment makes sense as an act of psychological projection. To people personally invested in politics, the homestretch of the campaign appears loaded with the kind of political information that could change voter opinions. There are debates, a flood of ads, inevitable gaffes, the crush of election news -- maybe even an October surprise or two. But undecided voters are precisely those least likely to tune in to the debates, which helps explain why debates typically have little effect on elections. They’re the least likely to care about a gaffe -- or even to know when one has occurred. They’re more likely to throw out political mail and tune out political ads. If they live in a swing state, they’ve already been buffeted by -- and proved immune to -- months of commercials and phone messages. Vavreck has been tracking a group of 44,000 voters since December 2011. When she started, 94 percent were already leaning toward a candidate. Of the 6 percent who were truly undecided, 33 percent now say they’re going with Mitt Romney and 37 percent with President Barack Obama. The ranks of the original undecided voters were partially replenished by voters who had expressed a preference in 2011 but have since grown uncertain. Of the new undecideds, slightly more were Romney supporters in 2011 than were Obama supporters, but the total numbers are small. There’s little reason to believe that undecided voters in this campaign will break sharply toward one candidate. The votes of the undecideds seem to be roughly evenly split, and if any big news happens between now and the election, they’re likely to be the last to know about it, and the least interested in following up on it. If Obama is going to turn this into a rout, or if Romney is to salvage a win, it will probably require changing minds that are already made up, or increasing (or suppressing) turnout among base voters. In other words, don’t expect the votes of the mythical undecideds to actually be decisive. It’s likely to be the decided who will, well, decide. (Ezra Klein is a Bloomberg View columnist. The opinions expressed are his own.)

#### Jobs and gas prices ensure public support---SMRs aren’t an election issue but if they were, links non U

Johnson 12 John, Nuclear Energy Insider, April 25, "US Campaign Trail: is nuclear in the equation?", analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation

In the next Presidential election, American voters will be voting with their pockets. We look at how the campaign so far has revealed which candidate will support nuclear R&D, nuclear new-build projects and ultimately preserve and create nuclear sector jobs. As the U.S. Presidential election draws closer, Americans are most concerned about job creation and how the candidates plan to boost the U.S. economy. Alternative energy policies have received a fair amount of publicity from the Obama administration, although nuclear power specifically is rarely mentioned on the campaign trial, primarily due to perceived safety questions. Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019. “There is certainly political consensus in support of clean generation, and large scale cultural consensus as well,” said Keeley. Political benefits of nuclear support As gas prices in the U.S. continue to soar, it’s possible that the tide will turn more in favor of nuclear and other clean energy sources, especially as electric cars take a stronger foothold. In addition, the job creation benefits from nuclear could work their way into the political landscape as well. The two new Vogtle nuclear plants are expected to create approximately 5,000 on-site jobs during the peak of construction, with 800 high paying jobs remaining over the life of the plant.

#### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

#### Winners win elections- the plan is key to Obama’s momentum

Creamer, 11 – political strategist for over four decades

(Robert, he and his firm, Democracy Partners, work with many of the country’s most significant issue campaigns, one of the major architects and organizers of the successful campaign to defeat the privatization of Social Security, he has been a consultant to the campaigns to end the war in Iraq, pass health care, pass Wall Street reform, he has also worked on hundreds of electoral campaigns at the local, state and national level, "Why GOP Collapse on the Payroll Tax Could be a Turning Point Moment," Huffington Post, 12-23-11, www.huffingtonpost.com/robert-creamer/why-gop-collapse-on-the-p\_b\_1167491.html, accessed 9-1-12, mss)

2). Strength and victory are **enormous political assets.** Going into the New Year, they now belong to the President and the Democrats. One of the reasons why the debt ceiling battle inflicted political damage on President Obama is that it made him appear ineffectual - a powerful figure who had been ensnared and held hostage by the Lilliputian pettiness of hundreds of swarming Tea Party ideological zealots. In the last few months -- as he campaigned for the American Jobs Act -- he has shaken free of those bonds. Now voters have just watched James Bond or Indiana Jones escape and turn the tables on his adversary. Great stories are about a protagonist who meets and overcomes a challenge and is victorious. The capitulation of the House Tea Party Republicans is so important because it feels like the beginning of that kind of heroic narrative. Even today most Americans believe that George Bush and the big Wall Street Banks - not by President Obama -- caused the economic crisis. Swing voters have never lost their fondness for the President and don't doubt his sincerity. But they had begun to doubt his effectiveness. They have had increasing doubts that Obama was up to the challenge of leading them back to economic prosperity. The narrative set in motion by the events of the last several weeks could be a turning point in voter perception. It could well begin to convince skeptical voters that Obama is precisely the kind of leader they thought he was back in 2008 - a guy with the ability to lead them out of adversity - a leader with the strength, patience, skill, will and resoluteness to lead them to victory. That now contrasts with the sheer political incompetence of the House Republican Leadership that allowed themselves to be cornered and now find themselves in political disarray. And it certainly contrasts with the political circus we have been watching in the Republican Presidential primary campaign. 3). This victory will inspire the dispirited Democratic base. Inspiration is the feeling of empowerment - the feeling that you are part of something larger than yourself and can personally play a significant role in achieving that goal. It comes from feeling that together you can overcome challenges and win. Nothing will do more to inspire committed Democrats than the sight of their leader -- President Obama - out maneuvering the House Republicans and forcing them into complete capitulation. The events of the last several weeks will send a jolt of electricity through the Progressive community. The right is counting on Progressives to be demoralized and dispirited in the coming election. The President's victory on the payroll tax and unemployment will make it ever more likely that they will be wrong. 4). When you have them on the run, that's the time to chase them. The most important thing about the outcome of the battle over the payroll tax and unemployment is that it shifts the political momentum at a critical time. Momentum is an independent variable in any competitive activity - including politics. In a football or basketball game you can feel the momentum shift. The tide of battle is all about momentum. The same is true in politics. And in politics it is even more important because the "spectators" are also the players - the voters. **People** follow - and **vote -- for winners**. The bandwagon effect is enormously important in political decision-making. Human beings like to travel in packs. They like to be at the center of the mainstream. Momentum shifts affect their perceptions of the mainstream. For the last two years, the right wing has been on the offensive. Its Tea Party shock troops took the battle to Democratic Members of Congress. In the Mid-Terms Democrats were routed in district after district. Now the tide has turned. And when the tide turns -when you have them on the run - that's the time to chase them.

## 1ar

### 1ar transition

#### Re-intervention

**Lieber 2005** – PhD from Harvard, Professor of Government and International Affairs at Georgetown, former consultant to the State Department and for National Intelligence Estimates (Robert, “The American Era”, pages 53-54, WEA)

Withdrawal from foreign commitments might seem to be a means of evading hostility toward the United States, but the consequences would almost certainly be harmful both to regional stability and to U.S. national interests. Although Europe would almost certainly not see the return to competitive balancing among regional powers (i.e., competition and even military rivalry between France and Germany) of the kind that some realist scholars of international relations have predicted,21 elsewhere the dangers could increase. In Asia, Japan, South Korea, and Taiwan would have strong motivation to acquire nuclear weapons – which they have the technological capacity to do quite quickly. Instability and regional competition could also escalate, not only between India and Pakistan, but also in Southeast Asia involving Vietnam, Thailand, Indonesia, and possibly the Philippines. Risks in the Middle East would be likely to increase, with regional competition among the major countries of the Gulf region (Iran, Saudi Arabia, and Iraq) as well as Egypt, Syria, and Israel. Major regional wars, eventually involving the use of weapons of mass destruction plus human suffering on a vast scale, floods of refugees, economic disruption, and risks to oil supplies are all readily conceivable. Based on past experience, the United States would almost certainly **be drawn back** into these areas, whether to defend friendly states, to cope with a humanitarian catastrophe, or to prevent a hostile power from dominating an entire region. Steven Peter Rosen has thus fittingly observed, “If the logic of American empire is unappealing, it is not at all clear that the **alternatives** are that much more attractive.”22 Similarly, Niall Ferguson has added that those who dislike American predominance ought to bear in mind that the alternative may not be a world of competing great powers, but one with no hegemon at all. Ferguson’s warning may be hyperbolic, but it hints at the perils that the absence of a dominant power, “apolarity,” could bring “an anarchic new Dark Age of waning empires and religious fanaticism; of endemic plunder and pillage in the world’s forgotten regions; of economic stagnation and civilization’s retreat into a few fortified enclaves.”23

#### Retrenchment causes global insecurity and war, causing U.S. re-intervention—makes heg bad impacts inevitable

Gottlieb 9/19—adjunct professor of International Affairs and Public Policy at the School of International and Public Affairs, Columbia University, two MA degrees and a PhD in international relations from Columbia (Stuart, 9/19/12, “What if U.S. stops policing the world?,” <http://www.cnn.com/2012/09/18/opinion/gottlieb-us-retrenchment/index.html>, RBatra)

But the question is not whether promises to bring home troops and reduce military spending can be sold in an election year -- the question is what impact would retrenchment have on future U.S. and global security. If history is any guide, the answer is troubling: Over the past century, each of America's attempts to reduce its role in the world was met by rising global threats, eventually requiring a major U.S. re-engagement.

This is not to argue that the U.S. should sustain its muscular post-9/11 global posture or continue its land war in Afghanistan. It is to urge caution against a growing belief that scaling back American power in the world will be without risks or costs.

History shows that in the aftermath of America's major wars of the 20th century -- World War I, World War II and Vietnam -- the American public and powerful leaders in Washington demanded strict new limits in foreign policy. After World War I, that meant rejecting participation in the League of Nations and receding into isolation. After World War II, it meant embarking on one of the largest voluntary military demobilizations in world history. And after Vietnam, it meant placing new restrictions on a president's ability to conduct overseas operations.

But in each case, hopes were soon dashed by global challengers who took advantage of America's effort to draw back from the world stage -- Germany and Japan in the 1930s, the Soviet Union in the immediate post-World War II period and the Soviet Union again after Vietnam. In each case, the United States was forced back into a paramount global leadership role -- in World War II, the Cold War and the military build-up and proxy wars of the 1980s.

Similar effects have also followed the withdrawal of U.S. troops from global hot spots, as in Somalia in 1993. America's need to extricate itself from that calamitous humanitarian mission, in which 18 U.S. soldiers were killed, was clear. But the withdrawal came at a huge strategic cost: It emboldened the narrative of the emerging al Qaeda network that America was a "paper tiger," setting the stage for the escalating terrorist attacks of the 1990s and September 11, 2001.

Obama's desire to withdraw from costly and unpopular foreign conflicts and refocus on domestic issues is understandable. And he is by no means an isolationist, as his intensified war on al Qaeda can attest.

But Obama's assertion that his recalibration of U.S. foreign policy -- centered on withdrawing U.S. troops from Mideast wars and leaning more on allies and the United Nations -- has awakened "a new confidence in our leadership" is without foundation.

Like Great Britain in the 19th century, America since the turn of the 20th century has been the world's pivotal global power. Fair or not, in moments when America seemed unsure of its role in the world, the world noticed and reacted.

There is no reason to believe now is different. Indeed, in many ways looming opportunists are more obvious today than the 1930s, 1970s and 1990s. These include al Qaeda and other Islamist movements spinning U.S. troop withdrawals from Iraq and Afghanistan as strategic defeats; an emboldened Iran on the cusp of attaining nuclear weapons; and a rising China flexing its muscles in the South China Sea.

#### Too little power is worse than too much—multipolarity risks nuclear war

**Nye 2008** – PhD, Dean of the Kennedy School of Government at Harvard (Joseph, “War, peace and hegemony in a globalized world”, page 37, edited by Chandra Chari – founder/editor of The Book Review, WEA)

Many realists extol the virtues of the classic nineteenth-century European balance of power in which constantly shifting coalitions contained the ambitions of any especially aggressive power. They urge the United States to rediscover the virtues of a multipolar balance of power at the global level today. French President Jacques Chirac has often appealed for a return to multipolarity. But whether such multipolarity would be good or bad for the world is debatable. **War was the constant companion** and crucial instrument **of the multipolar balance** of power. Rote adherence to the balance of power and multipolarity may prove to be a dangerous approach to global governance in a world where **war could turn nuclear**, or where the major new threats come from transnational terrorism. Many regions of the world and periods in history have seen stability when one power has been pre-eminent. As the historian Niall Ferguson has warned, in a disorderly world people may find that the problem in the future is too little American power rather than too much.4

### sustainability

#### Maintaining science competitiveness is vital to US economic leadership

**Bordoff et al, 6** - Policy Director of the Hamilton Project, an economic policy initiative housed at The Brookings Institution (Jason, “Promoting Opportunity and Growth through Science, Technology, and Innovation,” December,

http://works.bepress.com/cgi/viewcontent.cgi?article=1008&context=jason\_bordoff

Maintaining our nation’s economic leadership in the world and promoting broad-based growth at home will require effective policies to support research, innovation, and access to advanced information and telecommunications technologies. Innovation has long fueled economic growth, often giving rise to new industries and new jobs. According to the National Academies, “Since the Industrial Revolution, the growth of economies throughout the world has been driven largely by the pursuit of scientific understanding, the application of engineering solutions, and continual technological innovation” (National Academies 2005b, p. 2–1). Numerous academic studies confirm that technological progress has accounted for a significant share of U.S. economic growth;1 a recent study shows that the share of economic growth directly attributable to research and development (R&D) investment has increased over time.2 What makes knowledge, innovation, and technology such powerful drivers of economic growth is that, unlike capital and labor, they do not suffer from diminishing returns. Indeed, in many cases the creation of knowledge and technological innovation actually increase the return to further knowledge and innovation, thus creating a powerful growth mechanism (Romer 1986).

#### US power de-escalates and flips your economy impact

Mandelbaum, 5 (Michael, Christian A. Herter professor of American foreign policy at The Johns Hopkins University’s School of Advanced International Studies, *The Case For Goliath*, p.192-195)

Although the spread of nuclear weapons, with the corresponding increase in the likelihood that a nuclear shot would be fired in anger somewhere in the world, counted as the most serious potential consequence of the abandonment by the United States of its role as the world's government, it was not the only one. In the previous period of American international reticence, the 1920s and 1930s, the global economy suffered serious damage that a more active American role might have mitigated. A twenty-first-century American retreat could have similarly adverse international economic consequences. The economic collapse of the 1930s caused extensive hardship throughout the world and led indirectly to World War II by paving the way for the people who started it to gain power in Germany and Japan. In retrospect, the Great Depression is widely believed to have been caused by a series of errors in public policy that made an economic downturn far worse than it would have been had governments responded to it in appropriate fashion. Since the 1930s, acting on the lessons drawn from that experience by professional economists, governments have taken steps that have helped to prevent a recurrence of the disasters of that decade.5 In the face of reduced demand, for example, governments have increased rather than cut spending. Fiscal and monetary crises have evoked rescue efforts rather than a studied indifference based on the assumption that market forces will readily reestablish a desirable economic equilibrium. In contrast to the widespread practice of the 1930s, political authorities now understand that putting up barriers to imports in an attempt to revive domestic production will in fact worsen economic conditions everywhere. Still, a serious, prolonged failure of the international economy, inflicting the kind of hardship the world experienced in the 1930s (which some Asian countries also suffered as a result of their fiscal crises in the 1990s) does not lie beyond the realm of possibility. Market economies remain subject to cyclical downturns, which public policy can limit but has not found a way to eliminate entirely. Markets also have an inherent tendency to form bubbles, excessive values for particular assets, whether seventeenth century Dutch tulips or twentieth century Japanese real estate and Thai currency, that cause economic harm when the bubble bursts and prices plunge. In responding to these events, governments can make errors. They can act too slowly, or fail to implement the proper policies, or implement improper ones. Moreover, the global economy and the national economies that comprise it, like a living organism, change constantly and sometimes rapidly: Capital flows across sovereign borders, for instance, far more rapidly and in much greater volume in the early twenty-first century than ever before. This means that measures that successfully address economic malfunctions at one time may have less effect at another, just as medical science must cope with the appearance of new strains of influenza against which existing vaccines are not effective. Most importantly, since the Great Depression, an active American international economic role has been crucial both in fortifying the conditions for global economic well-being and in coping with the problems that have occurred, especially periodic recessions and currency crises, by applying the lessons of the past. The absence of such a role could weaken those conditions and aggravate those problems. The overall American role in the world since World War II therefore has something in common with the theme of the Frank Capra film It's a Wonderful Life, in which the angel Clarence, played by Henry Travers, shows James Stewart, playing the bank clerk George Bailey, who believes his existence to have been worthless, how life in his small town of Bedford Falls would have unfolded had he never been born. George Bailey learns that people he knows and loves turn out to be far worse off without him. So it is with the United States and its role as the world's government. Without that role, the world very likely would have been in the past, and would become a less secure and less prosperous place. The abdication by the United States of some or all of the responsibilities for international security that it had come to bear in the first decade of the twenty-first century would deprive the international system of one of its principal safety features, which keeps countries from smashing into each other, as they are historically prone to do. In this sense, a world without America would be the equivalent of a freeway full of cars without brakes. Similarly, should the American government abandon some or all of the ways in which it had, at the dawn of the new century, come to support global economic activity, the world economy would function less effectively and might even suffer a severe and costly breakdown. A world without the United States would in this way resemble a fleet of cars without gasoline.

### monteiro

#### Monteiro’s wrong

**Busby 12**, Josh, assistant professor of public affairs at the Lyndon B. Johnson School of Public Affairs [“Josh Busby on Unipolarity and International Relations,” January 6th, http://www.strausscenter.org/strauss-news/josh-busby-on-unipolarity-and-international-relations.html] HURWITZ

Strauss Scholar, Joshua Busby, wrote a three-part piece on the blog The Duck of Minerva, responding to two articles published by University of Chicago scholars Nuno Monteiro, and Sebastian Rosato and John Schuessler. The articles, and Busby’s response, focus on international relations, unipolarity and the realist approach to foreign policy. Busby’s first post critiques Nuno Monteiro’s article, “Unrest Assured: Why Unipolarity Is Not Peaceful” published in International Security. Monteiro argued that unipolarity has been less peaceful than other time periods. Busby disagrees with this argument, citing the contemporary era may create a “presentist bias” due to the overemphasis of our own lived experience and the omnipresence of the news media. Finally Busby addressed Moneiro’s argument that unipolarity drives conflict. Busby argues that **domestic-level factors in** both the United States and **potential adversaries, rather than U.S. power** alone, help explain recent conflicts.

#### Monteiro agrees the alt doesn’t solve

**Cambanis 12**, Thanassis, journalist, expert on Mideast policy[“The lonely superpower,” January 22nd, <http://articles.boston.com/2012-01-22/ideas/30646076_1_cold-war-nuclear-war-arms-race/5>] HURWITZ

Not everyone agrees that the United States would benefit from having a major rival. The best-known academic authority on American unipolarity, Dartmouth College political scientist William C. Wohlforth, argues that it’s still far better to be alone at the top. Overall, Wohlforth says, America spends less of its budget on defense than during the Cold War, and fewer Americans are killed in the conflicts in which it does engage. “Those who wish to have a peer competitor back are mistaken,” he said. “They forget the huge interventions of the Cold War.” Between 1945 and 1989, Wohlforth says, proxy wars between America and the Soviet Union killed hundreds of thousands of people, against the backdrop of a very real and terrifying threat of nuclear annihilation. Today, he says, the world is still dangerous, but it’s much less deadly and frightening than it was in the time of the nuclear arms race. For his part, Monteiro agrees that the Cold War was nasty and scary; he just wants to debunk the notion that what came next was any better. **According to Monteiro, bipolarity and unipolarity** pose different kinds of dangers, but **are equally problematic**.

### china-india\*\*

#### No India China war

**Ramachandran**, **2009** (12/24, Sudha - independent journalist/researcher based in Bangalore, India keeping up with the neighbor, The Asia Times, p. <http://www.atimes.com/atimes/South_Asia/KL24Df06.html>)

China and India engaged in a heated war of words in October and November, when India permitted the Dalai Lama to visit Tawang - territory in India's northeast over which China lays claim. A little over a month later, the two were coordinating their strategies at the Copenhagen climate summit, signaling there are areas where they can join together. Will conflict or cooperation define the Sino-Indian relationship in the coming decades? While obstacles strew the path to cooperation across the board, the fact that China and India are rising powers in an interdependent world rules out the possibility of all-out conflict. Relations in the past have been far from smooth. Frosty interactions resulting from the 1962 war over their disputed frontier only began to thaw in the 1980s

. Delhi and Beijing have come a long way since. The two have signed agreements to maintain peace along their frontier and on guiding principles for current negotiations to settle the dispute. Their armies have even engaged in joint exercises on Chinese and Indian soil. Although tension along the Line of Actual Control (LAC) erupts from time to time, the chances of all-out war have receded.

### dollar\*\*

#### Their evidence is hype—a t-bill selloff would hurt china’s economy; they won’t do it

**Goodman, 05** (Peter, Washington Post, 9/10, http://www.washingtonpost.com/wp-dyn/content/article/2005/09/09/AR2005090902025.html)

BEIJING, Sept. 9 -- China will not sell large quantities of U.S. Treasury bills despite its recent decision to sever the decade-old link between its currency, the yuan, and the dollar, a senior central bank official said here on Friday.

"If we sell large quantities of U.S. treasuries, it would cause the price to plunge," said Ma Delun, deputy governor of the People's Bank of China, speaking at a World Economic Forum conference. "We're not going to do that."

### asia

#### The impact is nuclear war—try or die for heg

**Goh 8** – Lecturer in International Relations in the Department of Politics and International Relations at the Univ of Oxford (Evelyn, International Relations of the Asia-Pacific, “Hierarchy and the role of the United States in the East Asian security order,” 2008 8(3):353-377, Oxford Journals Database)

The centrality of these mutual processes of assurance and deference means that the stability of a hierarchical order is fundamentally related to a collective sense of certainty about the leadership and order of the hierarchy. This certainty is rooted in a combination of material calculations – smaller states' assurance that the expected costs of the dominant state conquering them would be higher than the benefits – and ideational convictions – the sense of legitimacy, derived from shared values and norms that accompanies the super-ordinate state's authority in the social order. The empirical analysis in the next section shows that regional stability in East Asia in the post-Second World War years can be correlated to the degree of collective certainty about the US-led regional hierarchy. East Asian stability and instability has been determined by U.S. assurances, self-confidence, and commitment to maintaining its primary position in the regional hierarchy; the perceptions and confidence of regional states about US commitment; and the reactions of subordinate states in the region to the varied challengers to the regional hierarchical order.

4. Hierarchy and the East Asian security order

Currently, the regional hierarchy in East Asia is still dominated by the United States. Since the 1970s, China has increasingly claimed the position of second-ranked great power, a claim that is today legitimized by the hierarchical deference shown by smaller subordinate powers such as South Korea and Southeast Asia. Japan and South Korea can, by virtue of their alliance with the United States, be seen to occupy positions in a third layer of regional major powers, while India is ranked next on the strength of its new strategic relationship with Washington. North Korea sits outside the hierarchic order but affects it due to its military prowess and nuclear weapons capability.

Apart from making greater sense of recent history, conceiving of the US' role in East Asia as the dominant state in the regional hierarchy helps to clarify three critical puzzles in the contemporary international and East Asian security landscape.

First, it contributes to explaining the lack of sustained challenges to American global preponderance after the end of the Cold War. Three of the key potential global challengers to US unipolarity originate in Asia (China, India, and Japan), and their support for or acquiescence to, US dominance have helped to stabilize its global leadership. Through its dominance of the Asian regional hierarchy, the United States has been able to neutralize the potential threats to its position from Japan via an alliance, from India by gradually identifying and pursuing mutual commercial and strategic interests, and from China by encircling and deterring it with allied and friendly states that support American preponderance.

Secondly, recognizing US hierarchical preponderance further explains contemporary under-balancing in Asia, both against a rising China, and against incumbent American power. I have argued that one defining characteristic of a hierarchical system is voluntary subordination of lesser states to the dominant state, and that this goes beyond rationalistic bandwagoning because it is manifested in a social contract that comprises the related processes of hierarchical assurance and hierarchical deference. Critically, successful and sustainable hierarchical assurance and deference helps to explain why Japan is not yet a ‘normal’ country. Japan has experienced significant impetus to revise and expand the remit of its security forces in the last 15 years. Yet, these pressures continue to be insufficient to prompt a wholesale revision of its constitution and its remilitarization. The reason is that the United States extends its security umbrella over Japan through their alliance, which has led Tokyo not only to perceive no threat from US dominance, but has in fact helped to forge a security community between them (Nau, 2003). Adjustments in burden sharing in this alliance since the 1990s have arisen not from greater independent Japanese strategic activism, but rather from periods of strategic uncertainty and crises for Japan when it appeared that American hierarchical assurance, along with US' position at the top of the regional hierarchy, was in question. Thus, the Japanese priority in taking on more responsibility for regional security has been to improve its ability to facilitate the US' central position, rather than to challenge it.13 In the face of the security threats from North Korea and China, Tokyo's continued reliance on the security pact with the United States is rational. While there remains debate about Japan's re-militarization and the growing clout of nationalist ‘hawks’ in Tokyo, for regional and domestic political reasons, a sustained ‘normalization’ process cannot take place outside of the restraining framework of the United States–Japan alliance (Samuels, 2007; Pyle, 2007). Abandoning the alliance will entail Japan making a conscience choice not only to remove itself from the US-led hierarchy, but also to challenge the United States dominance directly.

The United States–ROK alliance may be understood in a similar way, although South Korea faces different sets of constraints because of its strategic priorities related to North Korea. As J.J. Suh argues, in spite of diminishing North Korean capabilities, which render the US security umbrella less critical, the alliance endures because of mutual identification – in South Korea, the image of the US as ‘the only conceivable protector against aggression from the North,’ and in the United States, an image of itself as protector of an allied nation now vulnerable to an ‘evil’ state suspected of transferring weapons of mass destruction to terrorist networks (Suh, 2004). Kang, in contrast, emphasizes how South Korea has become less enthusiastic about its ties with the United States – as indicated by domestic protests and the rejection of TMD – and points out that Seoul is not arming against a potential land invasion from China but rather maritime threats (Kang, 2003, pp.79–80). These observations are valid, but they can be explained by hierarchical deference toward the United States, rather than China. The ROK's military orientation reflects its identification with and dependence on the United States and its adoption of US' strategic aims. In spite of its primary concern with the North Korean threat, Seoul's formal strategic orientation is toward maritime threats, in line with Washington's regional strategy. Furthermore, recent South Korean Defense White Papers habitually cited a remilitarized Japan as a key threat. The best means of coping with such a threat would be continued reliance on the US security umbrella and on Washington's ability to restrain Japanese remilitarization (Eberstadt et al., 2007). Thus, while the United States–ROK bilateral relationship is not always easy, its durability is based on South Korea's fundamental acceptance of the United States as the region's primary state and reliance on it to defend and keep regional order. It also does not rule out Seoul and other US allies conducting business and engaging diplomatically with China.

India has increasingly adopted a similar strategy vis-à-vis China in recent years. Given its history of territorial and political disputes with China and its contemporary economic resurgence, India is seen as the key potential power balancer to a growing China. Yet, India has sought to negotiate settlements about border disputes with China, and has moved significantly toward developing closer strategic relations with the United States. Apart from invigorated defense cooperation in the form of military exchange programs and joint exercises, the key breakthrough was the agreement signed in July 2005 which facilitates renewed bilateral civilian nuclear cooperation (Mohan, 2007). Once again, this is a key regional power that could have balanced more directly and independently against China, but has rather chosen to align itself or bandwagon with the primary power, the United States, partly because of significant bilateral gains, but fundamentally in order to support the latter's regional order-managing function.

Recognizing a regional hierarchy and seeing that the lower layers of this hierarchy have become more active since the mid-1970s also allows us to understand why there has been no outright balancing of China by regional states since the 1990s. On the one hand, the US position at the top of the hierarchy has been revived since the mid-1990s, meaning that deterrence against potential Chinese aggression is reliable and in place.14 On the other hand, the aim of regional states is to try to consolidate China's inclusion in the regional hierarchy at the level below that of the United States, not to keep it down or to exclude it. East Asian states recognize that they cannot, without great cost to themselves, contain Chinese growth. But they hope to socialize China by enmeshing it in peaceful regional norms and economic and security institutions. They also know that they can also help to ensure that the capabilities gap between China and the United States remains wide enough to deter a power transition. Because this strategy requires persuading China about the appropriateness of its position in the hierarchy and of the legitimacy of the US position, all East Asian states engage significantly with China, with the small Southeast Asian states refusing openly to ‘choose sides’ between the United States and China. Yet, hierarchical deference continues to explain why regional institutions such as the ASEAN Regional Forum, ASEAN + 3, and East Asian Summit have made limited progress. While the United State has made room for regional multilateral institutions after the end of the Cold War, its hierarchical preponderance also constitutes the regional order to the extent that it cannot comfortably be excluded from any substantive strategic developments. On the part of some lesser states (particularly Japan and Singapore), hierarchical deference is manifested in inclusionary impulses (or at least impulses not to exclude the United States or US proxies) in regional institutions, such as the East Asia Summit in December 2005. Disagreement on this issue with others, including China and Malaysia, has stymied potential progress in these regional institutions (Malik, 2006).

Finally, conceiving of a US-led East Asian hierarchy amplifies our understanding of how and why the United States–China relationship is now the key to regional order. The vital nature of the Sino-American relationship stems from these two states' structural positions. As discussed earlier, China is the primary second-tier power in the regional hierarchy. However, as Chinese power grows and Chinese activism spreads beyond Asia, the United States is less and less able to see China as merely a regional power – witness the growing concerns about Chinese investment and aid in certain African countries. This causes a disjuncture between US global interests and US regional interests. Regional attempts to engage and socialize China are aimed at mediating its intentions. This process, however, cannot stem Chinese growth, which forms the material basis of US threat perceptions. Apprehensions about the growth of China's power culminates in US fears about the region being ‘lost’ to China, echoing Cold War concerns that transcribed regional defeats into systemic setbacks.15 On the other hand, the US security strategy post-Cold War and post-9/11 have regional manifestations that disadvantage China. The strengthening of US alliances with Japan and Australia; and the deployment of US troops to Central, South, and Southeast Asia all cause China to fear a consolidation of US global hegemony that will first threaten Chinese national security in the regional context and then stymie China's global reach.

Thus, the key determinants of the East Asian security order relate to two core questions: (i) Can the US be persuaded that China can act as a reliable ‘regional stakeholder’ that will help to buttress regional stability and US global security aims;16 and (ii) can China be convinced that the United States has neither territorial ambitions in Asia nor the desire to encircle China, but will help to promote Chinese development and stability as part of its global security strategy? (Wang, 2005). But, these questions cannot be asked in the abstract, outside the context of negotiation about their relative positions in the regional and global hierarchies. One urgent question for further investigation is how the process of assurance and deference operate at the topmost levels of a hierarchy? When we have two great powers of unequal strength but contesting claims and a closing capabilities gap in the same regional hierarchy, how much scope for negotiation is there, before a reversion to balancing dynamics? This is the main structural dilemma: as long as the United States does not give up its primary position in the Asian regional hierarchy, China is very unlikely to act in a way that will provide comforting answers to the two questions. Yet, the East Asian regional order has been and still is constituted by US hegemony, and to change that could be extremely disruptive and may lead to regional actors acting in highly destabilizing ways. Rapid Japanese remilitarization, armed conflict across the Taiwan Straits, Indian nuclear brinksmanship directed toward Pakistan, or a highly destabilized Korean peninsula are all illustrative of potential regional disruptions.

5. Conclusion

To construct a coherent account of East Asia's evolving security order, I have suggested that the United States is the central force in constituting regional stability and order. The major patterns of equilibrium and turbulence in the region since 1945 can be explained by the relative stability of the US position at the top of the regional hierarchy, with periods of greatest insecurity being correlated with greatest uncertainty over the American commitment to managing regional order. Furthermore, relationships of hierarchical assurance and hierarchical deference explain the unusual character of regional order in the post-Cold War era.

However, the greatest contemporary challenge to East Asian order is the potential conflict between China and the United States over rank ordering in the regional hierarchy, a contest made more potent because of the inter-twining of regional and global security concerns. Ultimately, though, investigating such questions of positionality requires conceptual lenses that go beyond basic material factors because it entails social and normative questions. How can China be brought more into a leadership position, while being persuaded to buy into shared strategic interests and constrain its own in ways that its vision of regional and global security may eventually be reconciled with that of the United States and other regional players? How can Washington be persuaded that its central position in the hierarchy must be ultimately shared in ways yet to be determined?

The future of the East Asian security order is tightly bound up with the durability of the United States' global leadership and regional domination. At the regional level, the main scenarios of disruption are an outright Chinese challenge to US leadership, or the defection of key US allies, particularly Japan. Recent history suggests, and the preceding analysis has shown, that challenges to or defections from US leadership will come at junctures where it appears that the US commitment to the region is in doubt, which in tu

rn destabilizes the hierarchical order. At the global level, American geopolitical over-extension will be the key cause of change. This is the one factor that could lead to both greater regional and global turbulence, if only by the attendant strategic uncertainly triggering off regional challenges or defections. However, it is notoriously difficult to gauge thresholds of over-extension. More positively, East Asia is a region that has adjusted to previous periods of uncertainty about US primacy. Arguably, the regional consensus over the United States as primary state in a system of benign hierarchy could accommodate a shifting of the strategic burden to US allies like Japan and Australia as a means of systemic preservation. The alternatives that could surface as a result of not doing so would appear to be much worse.

### 1ar ctbt

#### Even if Obama wins re-election, the math in the Senate makes ratification of CTBT impossible

**Global Security Newswire, 6-15-12**, p. http://www.nti.org/gsn/article/national-academies-report-grist-ctbt-debate-gottemoeller/

Only 41 senators who voted on the treaty in 1999 are still in office.

The current Senate has 51 Democrats, 47 Republicans and two independents who caucus with the Democrats.

All Democrats and independents backed New START in the Senate, along with 13 Republicans. Assuming that Obama’s base lines up behind him on the test ban, he would still need at least 14 GOP votes in favor of ratification if the treaty were brought to the Senate this year. No one expects that to occur, and the balance of party seats could be notably different beginning in January 2013, as 33 spots are up for grabs in the November elections.

The Senate GOP leadership directed a reporter’s questions about its position on the matter to Kyl’s office, which did not respond to calls for comment for this article. Kyl, though, is not seeking re-election this year and so might have a voice but no vote in a debate in 2013 or later.

Spring said the Obama administration is not likely to submit the treaty for approval unless it is confident it has the necessary votes. Those do not appear present now, and any turn in a more conservative direction after November would make the job even more difficult, he said.

While the administration can point to the dozen-plus Republican senators who crossed party lines in favor of New START ratification in late 2010, the party has since been outspoken in its criticism of Obama nuclear arms policy.

# r8 aff v. georgetown am

## 2ac

### 2ac a2 gtown t argument

#### WE meet – plan doesn’t mandate research reactors – question of solvency

#### Nuclear power production includes the whole fuel cycle – prefer ev about specific energy types

MIT ’11 (“The Future of Nuclear Power”, Chapter 4 – Fuel Cycles, 2011, <http://web.mit.edu/nuclearpower/pdf/nuclearpower-ch4-9.pdf>)

The description of a possible global growth scenario for nuclear power with 1000 or so GWe deployed worldwide must begin with some specification of the nuclear fuel cycles that will be in operation. The nuclear fuel cycle refers to all activities that occur in the production of nuclear energy. It is important to emphasize that producing nuclear energy requires more than a nuclear reactor steam supply system and the associated turbine-generator equipment required to produce electricity from the heat created by nuclear fission. The process includes ore mining, enrichment, fuel fabrication, waste management and disposal, and finally decontamination and decommissioning of facilities. All steps in the process must be specified, because each involves different technical, economic, safety, and environmental consequences. A vast number of different fuel cycles appear in the literature, and many have been utilized to one degree or another. We review the operating characteristics of a number of these fuel cycles, summarized in Appendix 4. In this report, our concern is not with the description of the technical details of each fuel cycle. Rather, we stress the importance of aligning the different fuel cycle options with the global growth scenario criteria that we have specified in the last section: cost, safety, nonproliferation, and waste. This is by no means an easy task, because objective quantitative measures are not obvious, there are great uncertainties, and it is difficult to harmonize technical and institutional features. Moreover, different fuel cycles will meet the four different objectives differently, and therefore the selection of one over the other will inevitably be a matter of judgment. All too often, advocates of a particular reactor type or fuel cycle are selective in emphasizing criteria that have led them to propose a particular candidate. We believe that detailed and thorough analysis is needed to properly evaluate the many fuel cycle alternatives. We do not believe that a new technical configuration exists that meets all the criteria we have set forth, e.g. there is not a technical ‘silver bullet’ that will satisfy each of the criteria. Accordingly, the choice of the best technical path requires a judgment balancing the characteristics of a particular fuel cycle against how well it meets the criteria we have adopted. Our analysis separates fuel cycles into two classes: “open” and “closed.” In the open or once-through fuel cycle, the spent fuel discharged from the reactor is treated as waste. See Figure 4.1. In the closed fuel cycle today, the spent fuel discharged from the reactor is reprocessed, and the products are partitioned into uranium (U) and plutonium (Pu) suitable for fabrication into oxide fuel or mixed oxide fuel (MOX) for recycle back into a reactor. See Figure 4.2. The rest of the spent fuel is treated as high-level waste (HLW). In the future, closed fuel cycles could include use of a dedicated reactor that would be used to transmute selected isotopes that have been separated from spent fuel. See Figure 4.3. The dedicated reactor also may be used as a breeder to produce new fissile fuel by neutron absorption at a rate that exceeds the consumption of fissile fuel by the neutron chain reaction.2 In such fuel cycles the waste stream will contain less actinides,3 which will significantly reduce the long-term radioactivity of the nuclear waste.4

#### And, thorium is part of that

Rees, 11 [“Don't believe the spin on thorium being a greener nuclear option [Ecologist](http://www.theecologist.org/): It produces less radioactive waste and more power but it remains unproven on a commercial scale”, Eifion, Ecologist, <http://www.guardian.co.uk/environment/2011/jun/23/thorium-nuclear-uranium>]

All other issues aside, thorium is still nuclear energy, say environmentalists, its reactors disgorging the same toxic byproducts and fissile waste with the same millennial half-lives. Oliver Tickell, author of Kyoto2, says the fission materials produced from thorium are of a different spectrum to those from uranium-235, but 'include many dangerous-to-health alpha and beta emitters'.

They misread federal code

Code of Federal Regulations 10 CFR 50 2012

Home > NRC Library > Document Collections > NRC Regulations (10 CFR) > Part 50--Domestic Licensing of Production and Utilization Facilities

http://www.nrc.gov/reading-rm/doc-collections/cfr/part050/full-text.html#top

§ 50.12 Specific exemptions.¶ (a) The Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of this part, which are--¶ (1) Authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security.¶ (2) The Commission will not consider granting an exemption unless special circumstances are present. Special circumstances are present whenever--¶ (i) Application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission; or¶ (ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or¶ (iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; or¶ (iv) The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption; or¶ (v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation; or¶ (vi) There is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If such condition is relied on exclusively for satisfying paragraph (a)(2) of this section, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.¶ (b) Any person may request an exemption permitting the conduct of activities prior to the issuance of a construction permit prohibited by § 50.10. The Commission may grant such an exemption upon considering and balancing the following factors:¶ (1) Whether conduct of the proposed activities will give rise to a significant adverse impact on the environment and the nature and extent of such impact, if any;¶ (2) Whether redress of any adverse environment impact from conduct of the proposed activities can reasonably be effected should such redress be necessary;¶ (3) Whether conduct of the proposed activities would foreclose subsequent adoption of alternatives; and¶ (4) The effect of delay in conducting such activities on the public interest, including the power needs to be used by the proposed facility, the availability of alternative sources, if any, to meet those needs on a timely basis and delay costs to the applicant and to consumers.

### 2ac solvency

#### Plan key to beat out natural gas

Lamonica 12 [Tech Review Writer 20 years of experience covering technology and business. Martin, A Glut of Natural Gas Leaves Nuclear Power Stalled, [www.technologyreview.com/news/428737/a-glut-of-natural-gas-leaves-nuclear-power/](http://www.technologyreview.com/news/428737/a-glut-of-natural-gas-leaves-nuclear-power/)]

The nuclear renaissance is in danger of petering out before it has even begun, but not for the reasons most people once thought. Forget safety concerns, or the problem of where to store nuclear waste—the issue is simply cheap, abundant natural gas. General Electric CEO Jeffrey Immelt caused a stir last month when he told the Financial Times that it's "hard to justify nuclear" in light of low natural gas prices. Since GE sells all manner of power generation equipment, including components for nuclear plants, Immelt's comments hold a lot of weight. Cheap natural gas has become the fuel of choice with electric utilities, making building expensive new nuclear plants an increasingly tough sell. The United States is awash in natural gas largely thanks to horizontal drilling and hydraulic fracturing, or "fracking" technology, which allows drillers to extract gas from shale deposits once considered too difficult to reach. In 2008, gas prices were approaching $13 per million BTUs; prices have now dropped to around $3. When gas prices were climbing, there were about 30 nuclear plant projects in various stages of planning in the United States. Now the Nuclear Energy Institute estimates that, at most, five plants will be built by 2020, and those will only be built thanks to favorable financing terms and the ability to pay for construction from consumers' current utility bills. Two reactors now under construction in Georgia, for example, moved ahead with the aid of an $8.33 billion loan guarantee from the U.S. Department of Energy. What happens after those planned projects is hard to predict. "The question is whether we'll see any new nuclear," says Revis James, the director of generation research and development at the Electric Power Research Institute. "The prospects are not good." Outside the United States, it's a different story. Unconventional sources of natural gas also threaten the expansion of nuclear, although the potential impact is less clear-cut. Around the world, there are 70 plants now under construction, but shale gas also looms as a key factor in planning for the future. Prices for natural gas are already higher in Asia and Europe, and shale gas resources are not as fully developed as they are the United States. Some countries are also blocking the development of new natural gas resources. France, for instance, which has a strong commitment to nuclear, has banned fracking in shale gas exploration because of concerns over the environmental impact. Fast-growing China, meanwhile, needs all the energy sources available and is building nuclear power plants as fast as possible. Even in United States, of course, super cheap natural gas will not last forever. With supply exceeding demand, some drillers are said to be losing money on natural gas, which could push prices back up. Prices will also be pushed upward by utilities, as they come to rely on more natural gas for power generation, says James. Ali Azad, the chief business development officer at energy company Babcock & Wilcox, thinks the answer is making nuclear power smaller, cheaper, and faster. His is one of a handful of companies developing small modular reactors that can be built in three years, rather than 10 or more, for a fraction of the cost of gigawatt-size reactors. Although this technology is not yet commercially proven, the company has a customer in the Tennessee Valley Authority, which expects to have its first unit online in 2021 (see "A Preassembled Nuclear Reactor"). "When we arrive, we will have a level cost of energy on the grid, which competes favorably with a brand-new combined-cycle natural gas plants when gas prices are between $6 to $8," said Azad. He sees strong demand in power-hungry China and places such as Saudia Arabia, where power is needed for desalination. Even if natural gas remains cheaper, utilities don't want to find themselves with an overreliance on gas, which has been volatile on price in the past, so nuclear power will still contribute to the energy mix. "[Utilities] still continue [with nuclear] but with a lower level of enthusiasm—it's a hedging strategy," says Hans-Holger Rogner from the Planning and Economics Studies section of the International Atomic Energy Agency. "They don't want to pull all their eggs in one basket because of the new kid on the block called shale gas."

#### And, the plan accelerates development

Barton, ‘9

[Charles, retired counselor, writes for Energy From Thorium, “The Liquid Fluoride Thorium Paradigm,” http://www.theoildrum.com/node/4971/]

The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. That is a safe assumption under "business-as-usual”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables?

#### The tech is realistic – basis is robust

Frye 8 [Copyright (c) 2008 Energy Bar Association Energy Law Journal 2008 Energy Law Journal 29 Energy L. J. 279 LENGTH: 54433 words ARTICLE: THE CURRENT "NUCLEAR RENAISSANCE" IN THE UNITED STATES, ITS UNDERLYING REASONS, AND ITS POTENTIAL PITFALLS NAME: Roland M. Frye, Jr.\* BIO: \* Mr. Frye has practiced in the field of federal energy regulation for thirty-one years, in both the public and private sectors, and has served for the last sixteen years as the Senior Attorney in the Office of Commission Appellate Adjudication of the United States Nuclear Regulatory Commission (NRC), p. lexis]

Other scientists have been exploring thorium as a possible fuel for nuclear reactors, and have made major strides in designing such a reactor. According to a recent reports, such a thorium-fueled reactor would not suffer a meltdown, would generate spent fuel which would remain radioactive for only about 500 years, would create either no weapons-grade byproducts at all or would create material that (due to intense gamma radiation) would be very difficult for bomb-makers to handle, would actually incinerate any plutonium that was added to the fuel mix (helping to dispose of high-level spent fuel from both nuclear reactor fuel and decommissioned nuclear weapons) - oh, and it also would generate cheap electricity. [n338](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n338) The idea of a thorium reactor is not mere pie-in-the-sky scientific theory - one American company, Thorium Power Ltd., is devoted solely to the development and promotion of thorium as a fuel for nuclear power plants, with [\*328] fuel specifically designed both to be proliferation-resistant and to reduce spent-fuel volume. Moreover, for plants seeking to burn off excess plutonium, the plutonium seed in the thorium fuel assembly burns "about three times faster and at somewhere between a third and half the cost of the mixed-oxide process" according to the company's Ernie Kennedy. [n339](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n339) Further, the company is not trying to develop an entirely new reactor design, but just a new fuel element that can be retrofitted into existing conventional nuclear power plants. In fact, Thorium Power expects its technology to be used in a commercial Russian VVER-1000 reactor as early as 2010, and to be "commercially proven" by 2013. [n340](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n340) Thorium Power is hardly a fly-by-night company. It has existed for sixteen years; Hans Blix (former head of the IAEA and UN weapons inspector) is one of its advisors; its executive chairman is Tom Graham (one of the world's leading non-proliferation experts); and the United Arab Emirates has recently appointed it as a consultant. Nor is Thorium Power the only American player in the thorium game. Northamerican Group Corporation has created a new division whose purpose is to develop thorium-based nuclear power generation facilities: The new division would undertake research, and develop both Thorium-based nuclear power generation facilities, and Thorium-based power cells. The company noted that... three top nuclear scientists, who are experts in the use of thorium and uranium in power generating plants, have agreed to join Northamerican's energy group. The scientists would lead the research and development of Thorium-based nuclear reactor... facilities that would help to ease the crunch on natural gas and fossil fuel electric generating facilities. [n341](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n341) In addition, a group of British scientists has "re-discovered" a salt-based thorium reactor design (originally constructed at Oak Ridge, Tennessee, in 1964) and that is now also being revisited by scientists in France, Germany, the Czech Republic, the Netherlands, Norway, Turkey, and Canada. [n342](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n342) This reactor design also has the advantages of being capable of breeding fuel, making hydrogen, and refueling without a reactor shutdown - plus its advocates claim that it is incapable of meltdown. [n343](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n343) India, which has ample thorium reserves, [n344](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n344) is seriously considering the construction of thorium-powered nuclear power [\*329] plants, [n345](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n345) and tentatively plans to build a 300-MW thorium-fueled reactor by 2020. [n346](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n346)

### 2ac water

#### This solves millions of deaths and prevents water wars

**Lehr ‘5**

Lehr - science director for The Heartland Institute and a leading expert in groundwater tech – 10-1-05 (Jay, “Water for Sale: How Business and The Market Can Resolve the World's Water Crisis”, The Heartland Institute, <http://www.heartland.org/Article.cfm?artId=17985>)

There is a great debate raging around the world about a future world water crisis. Some predict wars and civil conflicts, while others are more sanguine in their predictions. At this very moment nearly one-third of the world's population lacks an adequate sanitary water supply or domestic waste disposal system. Others are limited in their productivity by the hours they must spend fetching water or the limited water available to grow their food. Much of this continuing impoverishment exists because capitalism, privatization, and individual property rights are not allowed to play their role in obtaining and distributing water to citizens of less-developed nations. Because water is a necessity of life, much of the world believes it must be managed and distributed by the government at prices that rarely reflect its value. Water Wars Fredrik Segerfeldt, a communication specialist serving as senior advisor at the Confederation of Swedish Enterprise, has meticulously documented in Water for Sale: How Business and The Market Can Resolve the World's Water Crisis the full impact of government intervention in water supply the world over. Concurrently he shows that solutions can be found in the many case studies where privatization has served the public well. Segerfeldt tells us things are worst in the big cities of the Third World. "Every year more than a billion people contract water-related diseases and nearly half the urban population of many of Africa's, Asia's and Latin American cities may suffer from one or more diseases associated with inadequate water and sanitation." Water shortages account for approximately 12 million deaths annually throughout the less-developed world. According to Segerfeldt, during the past 550 years some 507 interstate conflict situations worldwide--including 21 cases of outright hostilities--have arisen from disagreements over water. Pricing Water The big problem regarding the price of water in poor parts of the world is that it is too low for supply and demand to converge. Instead of water being made to bear its own costs, Segerfeldt notes, "the production and distribution of it are subsidized out of taxation revenue. No less than $45 billion is spent in the third world subsidizing water." Excessively low prices fixed by politicians have led to waste and misallocation of resources--in short, inefficient use of water. Distribution has been managed by bureaucrats and public authorities with a low level of competence, little capital, and distorted incentive structures. Lack of property rights and no water trading have resulted in water being pent up in less productive activities, thereby compounding poverty. In developing countries, the price of water is so low that on average it covers only about 30 percent of the supplier's expense, so there is little money to use for maintenance and infrastructure investment to improve distribution and quality. If the price of water is so low that extending the supply network to new users costs more than the distributor can expect to recoup by means of charges, there is little reason why the network would get expanded. Why invest in a guaranteed loss? For political reasons, Segerfeldt says, "the price of water is simply too low. Everyone can afford it, but the government can't afford to reach enough people and those that get it waste it." Farmers--who account for 70 percent of the world's water consumption--are often hugely uneconomic about it, growing water-intense crops that are less nutritious and less profitable. Half the water used by farmers yields no crop at all because of poor practices. According to Segerfeldt, "a reduction of just 10% of the world's agricultural water would actually double the available potable water supply." Positive Example in Chile Among many excellent case studies in Segerfeldt's work is that of Chilean agriculture, which has accomplished a massive transformation thanks to trade in water. "Most important it has moved from low-value activities, such as cattle farming and cultivation of cereals, to fruits and wine production, which is much more lucrative," he writes. "The Chilean city of La Serena has for years been able to keep up with rising demand for water by purchasing it from farmers in outlying areas far more cheaply than if the city's taxpayers had been forced to finance a previously planned dam construction." Farmers owning the water they need for agriculture are not at the mercy of the public sector and its capricious pricing and quotas, and can make decisions in their economic best interest. Water trading is occurring more frequently around the world, but often illegally and thus not protected by the rule of law. India, Mexico, and Brazil are beginning to institute water trading legislation.Profit Motive Works For-profit water corporations are more likely than government bureaucracies to handle water with care. Profit motives give them strong incentives to conserve water and see to it that customers are served rather than water being spilled. Furthermore, trading will guarantee maximum output of water, while clearly defined and recognized property rights to water lower the risk of conflicts. When countries trade water with each other--allowing water to be acquired by means other than force--those peaceful means are likely to be used. Critics of privatization will highlight individual cases of poor families who still do not get water in spite of privatization. But profit impels companies to satisfy as many customers as possible. When water systems are privatized, the record shows, the number of people served increases by an average of 40 percent over the number served by the government-controlled water supply. Segerfeldt's extensive experience around the world yields the following insightful comment: "Anti-privatisation activists use separate standards when judging public and private water management. As soon as any fault occurs in the private distribution of water, their anti-corporation bias persuades them to blame privatisation. Public sector failure, on the other hand, is rarely blamed on the fact that it is in the government's hands."Increase Private Sector's Role The point of this book is not that all water distribution has to be private. Rather, Segerfeldt's main argument is that an increased role for private enterprise and market reforms, if carried out properly and wisely, could save millions of lives and give access to clean, safe water to hundreds of millions of people who today are deprived of it.

### 2ac prolif

#### Their US won’t use leverage card is aff evidence

Cleary 12

Richard Cleary, American Enterprise Institute Research Assistant, 8/13/12, Richard Cleary: Persuading Countries to Forgo Nuclear Fuel-Making, npolicy.org/article.php?aid=1192&tid=30

Conclusion

<Their Card>

The cases above offer a common lesson:  The U.S., though constrained or empowered by circumstance, can exert considerable sway in nonproliferation matters, but often elects not to apply the most powerful tools at its disposal for fear of jeopardizing other objectives. The persistent dilemma of how much to emphasize nonproliferation goals, and at what cost, has contributed to cases of nonproliferation failure. The inconsistent or incomplete application of U.S. power in nonproliferation cases is most harmful when it gives the impression to a nation that either sharing sensitive technology or developing it is, or will become, acceptable to Washington. U.S. reticence historically, with some exceptions, to prioritize nonproliferation—and in so doing reduce the chance of success in these cases—does not leave room for great optimism about future U.S. efforts at persuading countries to forgo nuclear fuel-making.

<Ends>

The most successful case above, South Korea, saw the U.S. put in question the basis of its relationship with Seoul, its security assurance, for nonproliferation aims. The potential near-term consequences of a South Korean nuclear weapon made this bold diplomatic maneuver worth the risk. But in other cases competing U.S. aims, often worthy, have impinged on nonproliferation goals, diluting efforts and sending mixed signals. In the case of Pakistan, for example, even well before the Soviet invasion of Afghanistan, the United States failed to use sufficiently forceful sticks or attractive carrots. U.S. efforts were bound by increasing distrust between Islamabad and Washington, a delicate geopolitical situation in the subcontinent given India’s close relationship with the Soviet Union, and facing a great challenge in a Pakistani leadership that was humiliated in 1971 and keen to reestablish some power equity with India. In negotiations with Iran regarding the nuclear cooperation agreement, U.S. policy makers–hoping to reinforce the NPT after the Indian test, avoid offending the Shah, and secure civilian nuclear contracts–were initially willing to make concessions on the issue of national reprocessing. In the case of the West Germany-Brazil contract, Kissinger went so far as to tell his counterpart in Bonn that, with expanded safeguards, the deal would be acceptable to Washington despite the clear proliferation risk from Brasilia.

The examples above show the **limitations of** both **demand and supply side efforts**. Supply side diplomatic interventions, made before the transfer of technology, have been at times effective, **particularly in precluding nuclear fuel-making** in the short term and buying time for more lasting solutions. However, as the Pakistan and Brazil cases illustrated, supply side interventions are no substitute for demand side solutions:  Countries face political choices regarding nuclear fuel-making. A nation set upon an independent fuel-making capacity, such as Pakistan or Brazil, is unlikely to give up efforts because of supply side controls. Multilateral fuel-making arrangements, as proposed repeatedly by the United States, have not materialized and therefore seem to have had little tangible influence.

In recent years, a new nonproliferation instrument has appeared:  a restructured 123 nuclear cooperation agreement, developed in the course of negotiations with the United Arab Emirates (UAE) and signed in 2009. This agreement, unlike previous bilateral nuclear cooperation agreements, offers a model for demand side nonproliferation, with the UAE vowing to forgo all enrichment and reprocessing technology on its own soil. It goes far beyond, for example, the “veto” on reprocessing of U.S.-origin spent fuel broached in the negotiations with the Shah. This “Gold Standard” agreement, much hailed at first, particularly in contrast to Iran’s enrichment activities, has begun to lose its luster as, once again, competing priorities marginalize nonproliferation. In January 2012, the Obama Administration announced that a “case by case” approach would be taken to the application of the Gold Standard. Countries such as Vietnam, where the U.S. holds out hope for a grander partnership aimed at countering China, may not be held to the UAE’s standard.100 Today, as in the 1970s with the Symington and Glenn Amendments, Congress seems most concerned about the prospect of proliferation of ENR technology.

#### And, its try or die for leadership – only that solves 123 agreements

Redmond, 11 [Summer, BIO- Everett Redmond is director of nonproliferation and fuel cycle policy at the Nuclear Energy Institute in Washington, D.C, U.S. Leadership Essential for International Nuclear Energy Programs, <http://www.fas.org/pubs/pir/oped/duly_noted_summer2011.html>]

U.S. suppliers are vying for business around the world – including China, Poland and India. Continued U.S. leadership in global nuclear safety and nonproliferation matters go hand-in-hand with a strong presence in the global marketplace. Both are critical to our national and global security. We must continue to participate in worldwide trade and nonproliferation policy discussions, or cede leadership in these areas to other governments and industrial competitors. Unless we choose engagement, America will lose tens of thousands of jobs and other benefits such trade has for our economy while forfeiting the nonproliferation benefits that 123 agreements are intended to achieve.

### 2ac a2 georgetown productionism k

#### Framework – the k needs to prove the whole plan is bad– any other interp moots aff offense and decreases policy education – critique alone isn’t enough to solve

**Kuzemko 12** [Caroline Kuzemko, CSGR University of Warwick, Security, the State and Political Agency: Putting ‘Politics’ back into UK Energy, <http://www.psa.ac.uk/journals/pdf/5/2012/381_61.pdf>]

Both Hay (2007) and Flinders and Buller (2006) suggest that there are other forms that depoliticisation can take, or in the terminology of Flinders and Buller ‘tactics’ which politicians can pursue in order to move a policy field to a more indirect governing relationship (Flinders and Buller 2006: 296). For the purposes of understanding the depoliticisation of UK energy policy, however, two of Colin Hay’s forms of depoliticisation are most useful: the ‘… offloading of areas of formal political responsibility to the market…’ and the passing of policymaking responsibility to quasipublic, or independent, authorities (Hay 2007: 82-3). 1 What each of these forms of depoliticisation has in common is the degree to which they can serve, over time, to reduce political capacity by removing processes of deliberation and contestation, thereby reducing the ability for informed agency and choice. In that politics can be understood as being inclusive of processes of deliberation, contestation, informed agency and collective choice the lack of deliberation and capacity for informed agency would result in sub-optimal politics (Hay 2007: 67; cf. Gamble 2000; Wood 2011; Jenkins 2011). There seems little doubt that, with regard to energy as a policy area, the principal of establishing a more indirect governing system had become accepted by UK political elites. One of the very few close observers of UK energy policy from the 1980s to early 2000s claims that both Conservative and New Labour politicians had actively sought to remove energy from politics, making it an ‘economic’ subject: From the early 1980s, British energy policy, and its associated regulatory regime, was designed to transform a state-owned and directed sector into a normal commodity market. Competition and 1 "These"forms"are"referred"to"elsewhere"by"the"author"as"‘marketised’"and"‘technocratic’"depoliticisation"(Kuzemko" 2012b:").liberalization would, its architects hoped, take energy out of the political arena… Labour shared this vision and hoped that energy would drop off the political agenda…. (Helm 2003: 386) 2 As already suggested this paper considers the intention to depoliticise energy to have been reasonably successful. By the early 2000s the Energy Ministry had been disbanded, there was little or no formal Parliamentary debate, energy was not represented at Cabinet level, responsibility for the supply of energy had been passed to the markets, it was regulated by an independent body, and the (cf. Kuzemko 2012b). Furthermore, the newly formed Energy Directorate within the Department of Trade and Industry (DTI), which now had responsibility for energy policy, had no specific energy mandates but instead mandates regarding encouraging the right conditions for business with an emphasis on competition (Helm et al 1989: 55; cf. Kuzemko 2012b: 107). As feared by various analysts who write about depoliticisation as a sub-optimal form of politics, these processes of depoliticisation had arguably resulted in a lack of deliberation about energy and its governance outside of narrow technocratic elite circles. Within these circles energy systems were modelled, language was specific and often unintelligible to others, including generalist politicians or wider publics, and this did, indeed, further encourage a high degree of disengagement with the subject (cf. Kern 2010; Kuzemko 2012b; Stern 1987). Technical language and hiring practices that emphasised certain forms of economic education further isolated elite technocratic circles from political contestation and other forms of knowledge about energy. Arguably, by placing those actors who have been elected to represent the national collective interest at one remove from processes of energy governance the result was a lack of formal political capacity in this policy field. It is worth, briefly, at this point reiterating the paradoxical nature of depoliticisation. Whilst decisions to depoliticise are deeply political, political capacity to deliberate, contest and act in an issue area can be reduced through these processes. Depoliticisation has been an ongoing form of governing throughout the 20 th century it may (Burnham 2001: 464), however, be particularly powerful and more difficult to reverse when underpinned by increasingly dominant ideas about how best to govern. For example Hay, in looking for the domestic sources of depoliticisation in the 1980s and 1990s, suggests that these processes were firmly underpinned by neoliberal and public choice ideas not only about the role of the state but also about the ability for political actors to make sound decisions relating, in particular, to economic governance (Hay 2007: 95-99). Given the degree to which such ideas were held increasingly to be legitimate over this time period depoliticisation was, arguably, genuinely understood by many as a process that would result in better governance (Interviews 1, 2, 3, 15 cf. Hay 2007: 94; Kern 2010). This to a certain extent makes decisions to depoliticise appear both less instrumental but also harder to reverse given the degree to which such ideas become further entrenched via processes of depoliticisation (cf. Kuzemko 2012b: 61-66; Wood 2011: 7).

#### Permutation do the plan and reject the aff’s neoliberal ideology – their author admits their k is just an interesting FYI

Zeller, 12 [Tom, Ozzie Zehner's 'Green Illusions' Ruffles Feathers. <http://www.huffingtonpost.com/tom-zeller-jr/ozzie-zehner-green-illusions_b_1710382.html>]

¶ Does that mean Zehner is anti-solar? He says no. "In my mind, 'Green Illusions' does not throw these technologies under the bus," he told me. "It just situates their full effects in context and shows how we could address the context to make these technologies more relevant."¶ "Alternative energy is not a free ride, just a different ride," he added, "and there's no reason to believe it will offset fossil fuel use in a society that has high levels of consumption and is growing exponentially."¶ Put another way, renewable energy only makes sense if undertaken in concert with other, more fundamental changes in the way we deploy and make use of energy in our everyday lives. At the moment, we're really paying attention to the technology end of things, Zehner argues, and without a holistic approach, these innovations get us nowhere.

#### And, the alt alone prevents any progressive energy change – the whole aff is a disad

Nead, 12 \*Citing a refuation of the book that their alt comes from [Benjamin Nead, Attacking EVs: New Book Says Electric Cars Aren't Clean employed by Arizona Public Media, the NPR/PBS affiliated radio/television complex at the University of Arizona in Tucson, since 1988. He is currently the local weekday/afternoon on-air host for KUAZ radio's NPR news and information programming. Prior to this, he was the station's evening weeknight Jazz music host. Ben was the coordinator for Tucson Plugs In 2011, one component of Plug In America's multi-city National Plug In Day, which occured on Sunday, October 16, 2011, http://www.plugincars.com/attacking-evs-new-book-says-electric-cars-arent-clean-123063.html

I'm being somewhat factitious in the above paragraph, of course, but it isn't all that different from your wide brush criticism of any or all that you are presumably excoriating in Green Illusions. Your online book reviews are causing quite a stir right now and I'm going to guess that this will move a lot of product for you. Unfortunately, most will emphasize only the most alarmist claims you make there in attacking emerging clean technologies. Those who hope to perpetuate the energy status quo - especially as its practiced in the U.S. today - will use only those points to do battle with aspects of emerging clean technology that could possibly do us some good. To paraphrase one of your own catchphrases, The Boomerang Effect, naysayers will take us full circle and back to where we are today - oil, urban sprawl, etc. - and conveniently leave out the joys of commuting to work with modest muscle and skipping that cheeseburger in favor of a salad.¶ Congratulations. You have just given the Republican nominee for U.S. President and his supporters a powerful new weapon.

#### And, Zellner causes transition wars

Harris 2 (Lee, Atlanta writer, policy review, the intellectual origins of America-bashing, <http://www.hoover.org/publications/policyreview/3458371.html>)

This is the immiserization thesis of Marx. And it is central to revolutionary Marxism, since if capitalism produces no widespread misery, then it also produces no fatal internal contradiction: If everyone is getting better off through capitalism, who will dream of struggling to overthrow it? Only genuine misery on the part of the workers would be sufficient to overturn the whole apparatus of the capitalist state, simply because, as Marx insisted, the capitalist class could not be realistically expected to relinquish control of the state apparatus and, with it, the monopoly of force. In this, Marx was absolutely correct. No capitalist society has ever willingly liquidated itself, and it is utopian to think that any ever will. Therefore, in order to achieve the goal of socialism, nothing short of a complete revolution would do; and this means, in point of fact, a full-fledged civil war not just within one society, but across the globe. Without this catastrophic upheaval, capitalism would remain completely in control of the social order and all socialist schemes would be reduced to pipe dreams.

#### Neoliberalism is inevitable and sustainable

**Peck 2**—Canada Research Chair in Urban & Regional Political Economy and Professor of Geography, University of British Columbia. Former Honourary Professorial Fellow, School of Environment and Development, University of Manchester. PhD in Geography. AND—Adam Tickell—Professor of Geography, University of Bristol. PhD (Jamie, Neoliberalizing space, Antipode 34 (3): 380-404, AMiles)

In many respects, it would be tempting to conclude with a Ideological reading of neoliberalism, as if it were somehow locked on a course of increasing vulnerability to crisis. Yet this would be both politically complacent and theoretically erroneous. One of the most striking features of the recent history of neoliberalism is its quite remarkable transformative capacity. To a greater extent than many would have predicted, including ourselves, neoliberalism has demonstrated an ability to absorb or displace crisis tendencies, to ride—and capitalize upon—the very economic cycles and localized policy failures that it was complicit in creating, and to erode the foundations upon which generalized or extralocal resistance might be constructed. The transformative potential—and consequent political durability—of neoliberalism has been repeatedly underestimated, and reports of its death correspondingly exaggerated. Although antiglobalization protests have clearly disrupted the functioning of "business as usual" for some sections of the neoliberal elite, the underlying power structures of neoliberalism remain substantially intact. What remains to be seen is how far these acts of resistance, asymmetrical though the power relations clearly are, serve to expose the true character of neoliberalism as a political project. In its own explicit politicization, then, the resistance movement may have the capacity to hold a mirror to the process

#### And, consumption practices are sustainable and prove no environment impact

**Norberg, 3** (Johan Norberg, Senior Fellow at Cato Institute, “In Defense of Global Capitalism”, p. 223)

It is a mistake, then, to believe that growth automatically ruins the environment. And claims that we would need this or that number of planets for the whole world to attain a Western standard of consumption—those “ecological footprint” calculations—are equally untruthful. Such a claim is usually made by environmentalists, and it is concerned, not so much with emissions and pollution, as with resources running out if everyone were to live as we do in the affluent world. Clearly, certain of the raw materials we use today, in present day quantities, would not suffice for the whole world if everyone consumed the same things. But that information is just about as interesting as if a prosperous Stone Age man were to say that, if everyone attained his level of consumption, there would not be enough stone, salt, and furs to go around. Raw **material consumption is not static**. With more and more people achieving a high level of prosperity, we start looking for ways of using other raw materials. Humanity is constantly improving technology so as to get at raw materials that were previously inaccessible, and we are attaining a level of prosperity that makes this possible. New innovations make it possible for old raw materials to be put to better use and for garbage to be turned into new raw materials. A century and a half ago, oil was just something black and sticky that people preferred not to step in and definitely did not want to find beneath their land. But our interest in finding better energy sources led to methods being devised for using oil, and today it is one of our prime resources. Sand has never been all that exciting or precious, but today it is a vital raw material in the most powerful technology of our age, the computer. In the form of silicon—which makes up a quarter of the earth's crust— it is a key component in computer chips. There is a **simple market mechanism that averts shortages**. If a certain raw material comes to be in short supply, its price goes up. This makes everyone more **interested in economizing** on **that resource**, in finding more of it, in reusing it, and in trying to find substitutes for it.

#### Market competition solves warfare

Gartzke 5—Former associate prof of pol sci, Columbia. Former associate prof of pol sci, USCD. PhD in International Relations, Formal/Quantitative Methods from U Iowa (Erik, “Future Depends on Capitalizing on Capitalist Peace,” 1 October 2005, http://www.cato.org/pub\_display.php?pub\_id=5133,)

With terrorism achieving "global reach" and conflict raging in Africa and the Middle East, you may have missed a startling fact - we are living in remarkably peaceable times. For six decades, developed nations have not fought each other. France and the United States may chafe, but the resulting conflict pitted french fries against "freedom fries," rather than French soldiers against U.S. "freedom fighters." Tony Blair and Jacques Chirac had a nasty spat over the EU, but the English aren't going to storm Calais any time soon. The present peace is unusual. Historically, powerful nations are the most war prone. The conventional wisdom is that democracy fosters peace but this claim fails scrutiny. It is based on statistical studies that show democracies typically don't fight other democracies. Yet, the same studies show that democratic nations go to war about as much as other nations overall. And more recent research makes clear that only the affluent democracies are less likely to fight each other. Poor democracies behave much like non-democracies when it comes to war and lesser forms of conflict. A more powerful explanation is emerging from newer, and older, empirical research - the "capitalist peace." As predicted by Montesquieu, Adam Smith, Norman Angell and others, nations with high levels of economic freedom not only fight each other less, they go to war less often, period. Economic freedom is a measure of the depth of free market institutions or, put another way, of capitalism. The "democratic peace" is a mirage created by the overlap between economic and political freedom. Democracy and economic freedom typically co-exist. Thus, if economic freedom causes peace, then statistically democracy will also appear to cause peace. When democracy and economic freedom are both included in a statistical model, the results reveal that economic freedom is considerably more potent in encouraging peace than democracy, 50 times more potent, in fact, according to my own research. Economic freedom is highly statistically significant (at the one-per-cent level). Democracy does not have a measurable impact, while nations with very low levels of economic freedom are 14 times more prone to conflict than those with very high levels. But, why would free markets cause peace? Capitalism is not only an immense generator of prosperity; it is also a revolutionary source of economic, social and political change. Wealth no longer arises primarily through land or control of natural resources. **New Kind of Wealth** Prosperity in modern societies is created by market competition and the efficient production that arises from it. This new kind of wealth is hard for nations to "steal" through conquest. In days of old, when the English did occasionally storm Calais, nobles dreamed of wealth and power in conquered lands, while visions of booty danced in the heads of peasant soldiers. Victory in war meant new property. In a free market economy, war destroys immense wealth for victor and loser alike. Even if capital stock is restored, efficient production requires property rights and free decisions by market participants that are difficult or impossible to co-ordinate to the victor's advantage. The Iraqi war, despite Iraq's immense oil wealth, will not be a money-maker for the United States. Economic freedom is not a guarantee of peace. Other factors, like ideology or the perceived need for self-defence, can still result in violence. But, where economic freedom has taken hold, it has made war less likely. Research on the capitalist peace has profound implications in today's world. Emerging democracies, which have not stabilized the institutions of economic freedom, appear to be at least as warlike - perhaps more so - than emerging dictatorships. Yet, the United States and other western nations are putting immense resources into democratization even in nations that lack functioning free markets. This is in part based on the faulty premise of a "democratic peace." It may also in part be due to public perception. Everyone approves of democracy, but "capitalism" is often a dirty word. However, in recent decades, an increasing number of people have rediscovered the economic virtues of the "invisible hand" of free markets. We now have an additional benefit of economic freedom - international peace. The actual presence of peace in much of the world sets this era apart from others. The empirical basis for optimistic claims - about either democracy or capitalism - can be tested and refined. The way forward is to capitalize on the capitalist peace, to deepen its roots and extend it to more countries through expanding markets, development, and a common sense of international purpose. The risk today is that faulty analysis and anti-market activists may distract the developed nations from this historic opportunity.

### 2ac states cp

#### Federal guarantees are vital to getting investors on board – superior credit rating

**Sullivan and Walsh, 8 -** Mary Anne Sullivan, partner in Hogan & Hartson's energy practice, has more than 25 years of experience as an energy lawyer. She previously served as general counsel of the U.S. Department of Energy and as deputy general counsel for environment and nuclear programs. Sam Walsh is an associate at Hogan & Hartson (“Federal Loan Guarantees,” Electric Light and Power, Mar/April, ABI Inform)

In their rulemaking comments, Wall Street firms emphasized that a loan guarantee must represent the unconditional commitment of the full faith and credit of the United States if the program is to succeed in attracting affordable private investment to innovative technologies. The final rule seems to have calmed concerns that the guarantees might be conditioned in a way that would preclude the "AAA" rating for the federally guaranteed debt that the program was designed to assure. The guarantees will be absolute, absent fraud or material misrepresentation by the holder of a guaranteed obligation.

#### State incentives fail – federal loan guarantees attract substantially more investment capital

**NEI, 11** – Nuclear Energy Institute “Issues in Focus Loan Guarantees For Clean Energy Development” http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCkQFjAB&url=http%3A%2F%2Fwww.nei.org%2Ffilefolder%2Floanguaranteefastfacts.pdf&ei=PCJsUNTiJKbA2gXymYAg&usg=AFQjCNEzvSlK0TiMZStFOzXeQDIf76vQBw)

State governments are doing their part. Many of the states where new nuclear plants are planned – including Florida, Virginia, Texas, Louisiana, Mississippi, North Carolina and South Carolina – have passed legislation or implemented new regulations to encourage construction of new nuclear power plants by providing financing support and/or assurance of investment recovery.

By itself, this state support is not sufficient. The federal government must also provide financing support for deployment of clean energy technologies in the numbers necessary to address growing U.S. electricity needs and reduce carbon emissions. The clean energy loan guarantee program authorized by the Energy Policy Act of 2005 is equally important.

Although tax stimulus – either in the form of tax credits or more favorable depreciation terms – can play an important role in encouraging investment, loan guarantees are a very efficient way to mobilize private capital. Tax benefits have a direct, dollar-for-dollar impact on the federal budget. Even if the credit subsidy cost associated with a loan guarantee is appropriated, loan guarantees provide substantial leverage. Tens of millions of dollars in appropriations to support a loan guarantee program can leverage tens of billions of dollars in private sector investment.

#### Certainty is essential – only effective method of catalyzing investment

**Trembath, 11** [2/4/11, [Nuclear Power and the Future of Post-Partisan Energy Policy](http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/), Alex Trembath is a policy associate in the Energy and Climate Program at Breakthrough. He is the lead or co-author of several Breakthrough publications, including the 2012 report "Beyond Boom and Bust: Putting Clean Tech on a Path to Subsidy Independence" and "Where the Shale Gas Revolution Came From." Alex is a graduate of University of California at Berkeley, <http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/>]

If there is one field of the energy sector for which certainty of political will and government policy is essential, it is nuclear power. High up front costs for the private industry, extreme regulatory oversight and public wariness necessitate a committed government partner for private firms investing in nuclear technology. In a new [report](http://www.thirdway.org/publications/370) on the potential for a “nuclear renaissance,” Third Way references the failed cap-and-trade bill, delaying tactics in the House vis-a-vis EPA regulations on CO₂, and the recent election results to emphasize the difficult current political environment for advancing new nuclear policy. The report, “The Future of Nuclear Energy,” makes the case for political certainty: “It is difficult for energy producers and users to estimate the relative price for nuclear-generated energy compared to fossil fuel alternatives (e.g. natural gas)–an essential consideration in making the major capital investment decision necessary for new energy production that will be in place for decades.” Are our politicians willing to match the level of certainty that the nuclear industry demands? Lacking a suitable price on carbon that may have been achieved by a cap-and-trade bill removes one primary policy instrument for making nuclear power more cost-competitive with fossil fuels. The impetus on Congress, therefore, will be to shift from demand-side “pull” energy policies (that increase demand for clean tech by raising the price of dirty energy) to [supply-side “push” policies](http://leadenergy.org/2010/09/supply-demand-energy-innovation/), or industrial and innovation policies. Fortunately, there are signals from political and thought leaders that a package of policies may emerge to incentivize alternative energy sources that include nuclear power. One place to start is the recently deceased American Power Act, addressed above, authored originally by Senators Kerry, Graham and Lieberman. Before its final and disappointing incarnation, the bill [included](http://www.huffingtonpost.com/2010/05/12/american-power-act-photos_n_573643.html#s90041&title=undefined) provisions to increase loan guarantees for nuclear power plant construction in addition to other tax incentives. Loan guarantees are probably the most important method of government involvement in new plant construction, given the high capital costs of development. One wonders what the fate of the bill, or a less ambitious set of its provisions, would have been had Republican Senator Graham not abdicated and removed any hope of Republican co-sponsorship. But that was last year. The changing of the guard in Congress makes this a whole different game, and the once feasible support for nuclear technology on either side of the aisle must be reevaluated. A New York Times [piece](http://www.nytimes.com/2010/11/17/business/energy-environment/17NUCLEAR.html) in the aftermath of the elections forecast a difficult road ahead for nuclear energy policy, but did note Republican support for programs like a waste disposal site and loan guarantees. Republican support for nuclear energy has roots in the most significant recent energy legislation, the Energy Policy Act of 2005, which passed provisions for nuclear power with wide bipartisan support. Reaching out to Republicans on policies they have supported in the past should be a goal of Democrats who wish to form a foundational debate on moving the policy forward. There are also signals that key Republicans, notably [Lindsey Graham](http://washingtonindependent.com/99171/graham-circulating-clean-energy-standard) and [Richard Lugar](http://www.plattsenergyweektv.com/story.aspx?storyid=132784&catid=293), would throw their support behind a clean energy standard that includes nuclear and CCS. Republicans in Congress will find intellectual support from a group that AEL’s Teryn Norris coined [“innovation hawks,”](http://leadenergy.org/2011/01/the-rise-of-innovation-hawks/) among them Steven Hayward, David Brooks and George Will. Will has been [particularly outspoken](http://www.newsweek.com/2010/04/08/this-nuclear-option-is-nuclear.html) in support of nuclear energy, writing in 2010 that “it is a travesty that the nation that first harnessed nuclear energy has neglected it so long because fads about supposed ‘green energy’ and superstitions about nuclear power’s dangers.” The extreme reluctance of Republicans to cooperate with Democrats over the last two years is only the first step, as any legislation will have to overcome Democrats’ traditional opposition to nuclear energy. However, here again there is reason for optimism. Barbara Boxer and John Kerry bucked their party’s long-time aversion to nuclear in a precursor bill to APA, and Kerry continued working on the issue during 2010. Jeff Bingaman, in a speech earlier this week, reversed his position on the issue by calling for the inclusion of nuclear energy provisions in a clean energy standard. The Huffington Post [reports](http://www.huffingtonpost.com/2011/02/01/sen-jeff-bingaman-backs-n_n_816864.html) that “the White House reached out to his committee [Senate Energy] to help develop the clean energy plan through legislation.” This development in itself potentially mitigates two of the largest obstacle standing in the way of progress on comprehensive energy legislation: lack of a bill, and lack of high profile sponsors. Democrats can also direct [Section 48C](http://leadenergy.org/2010/12/clean-energy-financing-first-steps-towards-post-partisan-effort/#more-3320) of the American Recovery and Reinvestment Act of 2009 towards nuclear technology, which provides a tax credit for companies that engage in clean tech manufacturing. Democrats should not give up on their policy goals simply because they no longer enjoy broad majorities in both Houses, and Republicans should not spend all their time holding symbolic repeal votes on the Obama Administration’s accomplishments. The lame-duck votes in December on “Don’t Ask, Don’t Tell,” the tax cut deal and START indicate that at least a few Republicans are willing to work together with Democrats in a divided Congress, and that is precisely what nuclear energy needs moving forward. It will require an agressive push from the White House, and a concerted effort from both parties’ leadership, but the road for forging bipartisan legislation is not an impassable one. The politician with perhaps the single greatest leverage over the future of nuclear energy is President Obama, and his rhetoric matches the challenge posed by our aging and poisonous energy infrastructure. “This is our generation’s Sputnik moment,” announced Obama recently. Echoing the calls of presidents past, the President used his [State of the Union](http://www.slate.com/id/2281847/) podium to signal a newly invigorated industrialism in the United States. He advocated broadly for renewed investment in infrastructure, education, and technological innovation. And he did so in a room with many more members of the opposition party than at any point during the first half of his term. The eagerness of the President to combine left and right agendas can hopefully match the hyper-partisan bitterness that dominates our political culture, and nuclear power maybe one sector of our economy to benefit from his political leadership.

#### A firm commitment to loan guarantees resolves investor uncertainty over federal restrictions

**Turnage et al, 7** – Senior Vice President, Constellation Energy Group Inc

(Joe C, and Theodore Bunting, Jr, Senior Vice President of Finance, Entergy Corp, and John F Young, Executive Vice President and CFO, Exelon Corp, and Steve Winn, Executive Vice President, NRG Energy, Inc, “Join Comments of Constellation Group, Inc, Entergy Corporation, Exelon Corporation, and NRG Energy, Inc. regarding Proposed Rule, Loan Guarantees for Projects that Employ Innovative Technologies,” addressed to Mr. Howard G Bordstrom, July 2, 2007, <http://www.lgprogram.energy.gov/nopr-comments/comment41.pdf>)

**For new nuclear power plant development in the United States, Federal loan guarantees are an indispensable instrument to address a market financing gap that results from** the combination of several factors including, (i) **the prior nuclear plant construction cycle that was burdened by regulatory uncertainty** and resulting delays and cost overruns; (ii) **perceived uncertainty of an untested** (though certainly improved) **licensing system;** (iii) **perceived technology risk, and** (iv) an **institutional loss of understanding regarding the reality of nuclear financial risk** in some elements of the financial community.

### 2ac fiscal cliff

#### No impact – ‘fiscal cliff’ overblown

Christine Benz (writer for the Morningstar) September 23, 2012 ‘Who's Getting Conservative in Advance of the Fiscal Cliff?

'The Fiscal Cliff Is More Like a Fiscal Stairway' Even as some posters were actively making changes with the expectation of a rough patch, many others are standing pat. The, worries over the fiscal cliff are overblown in KitCat's view. "I have hopes (or some may call it hopeless optimism) that something will be done about the fiscal cliff. Maybe not everything as I'd prefer it, but I feel 75% will be. Therefore [I have] no plans for any changes at this point." Sezen13 also argues that worries over the fiscal cliff are overblown. "The fiscal cliff is more like a fiscal stairway, a gradual descent, federal taxes raised a small amount, spending cuts spread over a period of time. Any adverse impact will likely be short, soon swamped by worldwide economic events."

#### No impact to defense sequestration

Lawrence Korb (former assistant secretary of defense in the Reagan administration, is a senior fellow at the Center for American Progress) September 9, 2012 ‘Cuts Would Not Affect Security” http://www.nytimes.com/roomfordebate/2012/09/09/how-big-should-the-defense-budget-be/cuts-would-not-affect-security

But the United States can afford defense cuts, without undermining national security, for four reasons:¶ First, the United States has just gone through an enormous defense buildup. The budget increased, in real terms, for an unprecedented 13 straight years between 1998 and 2012. Even during the Reagan buildup, defense spending grew for only four years before dropping back to more sustainable levels.¶ Second, the cuts being discussed are smaller than they seem. The first $500 billion come from projected growth, so the budget will fall by just $6 billion next year and then grow at about the same pace as inflation. Even with sequestration, defense spending would be brought back only to its 2006 level in real terms -- more than we spent on average under Presidents Ronald Reagan and George H. W. Bush.¶ Third, ending this indiscriminate growth will force the Pentagon to manage its funds more carefully. Over the past decade, the Pentagon squandered $46 billion on weapons it later canceled, and let half its procurement programs balloon beyond their original budgets.¶ Finally, we face a world with relatively few major threats. And even with sequestration-size cuts, we would still account for more than 40 percent of the world’s defense spending, and our allies would account for about half of the rest.

#### Shared interests check middle east war

**Gelb, 10** – President Emeritus of the Council on Foreign Relations He was a senior official in the U.S. Defense Department from 1967 to 1969 and in the State Department from 1977 to 1979 (Leslie, Foreign Affairs, “GDP Now Matters More Than Force: A U.S. Foreign Policy for the Age of Economic Power,” November/December, proquest)

Also reducing the likelihood of conflict today is that there is no arena in which the vital interests of great powers seriously clash. Indeed, the most worrisome security threats today-rogue states with nuclear weapons and terrorists with weapons of mass destruction-actually tend to unite the great powers more than divide them. In the past, and specifically during the first era of globalization, major powers would war over practically nothing. Back then, they fought over the Balkans, a region devoid of resources and geographic importance, a strategic zero. Today, they are unlikely to shoulder their arms over almost anything, even the highly strategic Middle East. All have much more to lose than to gain from turmoil in that region. To be sure, great powers such as China and Russia will tussle with one another for advantages, but they will stop well short of direct confrontation.

#### Won’t pass now

Scott Shane (writer for Terra) September 30, 2012 “Should Small Business Fear the Fiscal Cliff? (Opinion)” http://news.terra.com/should-small-business-fear-the-fiscal-cliff-opinion,ee822291a771a310VgnVCM10000098cceb0aRCRD.html

It’s difficult to envision a political solution that keeps the U.S. from going over the fiscal cliff. Right now Congress is in full election mode and won’t do anything but posture before Nov. 6. Even after the election, a lame-duck Congress is unlikely to act. Moreover, no matter how the election turns out, action in January seems unlikely. The Democrats are unlikely to reverse the tax increases that contribute to the fiscal cliff if they control the presidency and both houses of Congress come January. A government divided between the two major parties would be unlikely to agree on taxes and government spending. And while the Republicans might reverse the tax increases that contribute to the fiscal cliff if they control both houses of Congress and the presidency in 2013, the Tea Party wing of the GOP isn’t likely to agree to reversing scheduled spending cuts. If the Las Vegas bookmakers will take the bet, putting money on the economy going over the fiscal cliff and returning to recession in 2013 is (sadly) a good wager.

#### Fiat means the plan passes now, which means it doesn’t impact the lame duck – best and most predictable interpretation of fiat

#### Obama wont spend PC on the plan

James Rainey (writer for the LA Times) September 25, 2012 “Would President Obama try stimulus spending again?” http://www.latimes.com/news/politics/la-pn-obama-stimulus-20120924,0,169153.story

Many economists on the Democratic side have been arguing vehemently that the threat from long-term debt is not nearly as great as the long-term damage from allowing the recovery to continue to sputter, costing millions of jobs and the tax receipts that come with them. It’s hard to imagine today that Obama would expend much political capital in trying to win more government spending — given the Republican Party’s control of the House and the public’s lukewarm, at best, response to increasing the deficit. Given that reality, the pro-stimulus argument has been raised only fleetingly in Washington.

#### Political capital wont be key in the lameduck – Obama’s got no leverage even after winning

Eleanor Clift (Contributing Editor to Newsweek) September 30, 2012 “If Obama Wins, What Changes for His Second Term?” http://www.thedailybeast.com/articles/2012/09/30/if-obama-wins-what-changes-for-his-second-term.html

With an Obama second term looking like a better than even probability, short of sweeping both chambers of Congress, can the newly reelected president break the stalemate in Washington and govern successfully? He says the partisan fever will break once he cannot run again. He may be right, but President Obama will have to move quickly after the election to send the right signals of strength and resolve, and position himself to take advantage of the recriminations among Republicans that inevitably will surface in the wake of a Romney defeat.¶ If the GOP loses House seats and falls short of the four seats necessary to control the Senate, there’s an opening for Obama to woo disgruntled Republicans while keeping newly energized Democrats together. Like Clinton-era triangulation, the strategy is divide-and-conquer—except this time it’s applied to Republicans.¶ Does Obama have the chops to work more effectively with Congress? “There’s no better learning experience than the first term,” says former Senate leader Tom Daschle, an Obama confidant. The inexperienced president learned the hard way he can’t trust the other side, and with time has gotten bolder and better at wielding power. Republicans are still reeling from his changing the policy on deporting illegal immigrants without congressional approval.¶ But Obama doesn’t have many friends on Capitol Hill in either party. He has allies for sure but hasn’t worked to develop personal relationships. Some think this is a fatal flaw; others say schmoozing is overrated, that the Republicans were going to block Obama’s initiatives regardless of how many White House invites they got.¶ “Reagan didn’t always enjoy meeting with 535 members; it was a means to an end,” says Ken Duberstein, who worked in the Reagan White House, first in congressional relations, then as chief of staff. “You have to have the relationships—you have to know each other. Every White House screws up and you have to have a reservoir of good will.”¶ One adviser who did not want to be quoted recalls gently suggesting Obama might want to invest more personal time in courting members of Congress. “He looked at me like I was telling him to do 10 root canals.”¶ Tom Mann and Norman Ornstein, coauthors of It’s Even Worse Than It Looks, an indictment of Republican obstructionism, say it is “utter nonsense” to think more schmoozing is the answer. “For Obama to have a successful second term, he needs a different Republican Party,” says Mann. “He has to hope the election is decisive enough to rattle the party and make [the GOP] realize that a continued strategy of obstruction will not be good for them over the long haul.”

#### Treasury secretary nomination will handle the negotiations

Erza Klein (editor of Wonkblog and a columnist at the Washington Post, as well as a contributor to MSNBC and Bloomberg) October 1, 2012 “Wonkbook: The payroll tax cut looks done for” http://www.washingtonpost.com/blogs/ezra-klein/wp/2012/10/01/wonkbook-the-payroll-tax-cut-looks-done-for/

Obama is looking to line up another Treasury secretary for the second term. ”If re-elected, President Barack Obama is expected to move quickly in November to nominate a new Treasury secretary, and that person could play a key role negotiating with Congress about the looming ‘fiscal cliff’ of tax increases and spending cuts, people familiar with the planning said. The two people most frequently mentioned by current and former administration officials as likely successors to Treasury Secretary Timothy Geithner, who wants to leave the post, are White House Chief of Staff Jacob Lew and Clinton administration Chief of Staff Erskine Bowles.” Damian Paletta in The Wall Street Journal.

#### The plan has political legs – reserves, track record, and environmental benefits

Frye, 08 [Copyright (c) 2008 Energy Bar Association Energy Law Journal 2008 Energy Law Journal 29 Energy L. J. 279 LENGTH: 54433 words ARTICLE: THE CURRENT "NUCLEAR RENAISSANCE" IN THE UNITED STATES, ITS UNDERLYING REASONS, AND ITS POTENTIAL PITFALLS NAME: Roland M. Frye, Jr.\* BIO: \* Mr. Frye has practiced in the field of federal energy regulation for thirty-one years, in both the public and private sectors, and has served for the last sixteen years as the Senior Attorney in the Office of Commission Appellate Adjudication of the United States Nuclear Regulatory Commission (NRC), p. lexis]

The bulk of thorium reserves are within countries friendly to the United States. [n347](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n347) This may be one reason why, within the U.S., thorium has "political legs." Senator Orrin Hatch (R-Utah) is seeking to require DOE to develop standards for the use of thorium rather than uranium as fuel for nuclear power plants. His legislation "would force... [the DOE]... and the [NRC]... to create new offices at [those two] agencies to study thorium-fuel options and promote their use abroad." [n348](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n348) In fact, Sen. Hatch has joined with Sen. Harry Reid (D-Nev.) to sponsor the Thorium Energy Independence and Security Act of 2008, providing $ 250 million to this end. [n349](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n349) This is particularly important because DOE is currently wedded to the controversial alternative concept of the closed uranium fuel cycle, which involves reprocessing spent fuel, using a uranium-plutonium fuel blend, and burning the fuel in breeder reactors.

Another likely reason for thorium's political legs is its existing track record within the United States: the first Indian Point reactor outside New York City  [\*330]  used a thorium-uranium blend of fuel in the 1960s and 1970s, as did the Oak Ridge Tennessee reactor mentioned above. A third reason for thorium's political legs is that at least some in the **environmental** community view it as preferable to any other nuclear energy option. For instance, the Natural Resources Defense Council, through its Nuclear Program Director Thomas B. Cochran, considers both Senator Hatch's bill and thorium power to "make[] a lot of sense." [n350](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n350)

#### Systematic research proves

**Edwards, 9** [Distinguished Professor of Political Science at Texas A&M University, holds the George and Julia Blucher Jordan Chair in Presidential Studies and has served as the Olin Professor of American Government at Oxford [George, “The Strategic President”, Printed by the Princeton University Press, pg. 149-150]

Even presidents who appeared to dominate Congress were actually facilitators rather than directors of change. They understood their own limitations and explicitly took advantage of opportunities in their environments. Working at the margins, they successfully guided legislation through Congress. When their resources diminished, they reverted to the stalemate that usually characterizes presidential-congressional relations. As legendary management expert Peter Drucker put it about Ronald Reagan, "His great strength was not charisma, as is commonly thought, but his awareness and acceptance of exactly what he could and what he could not do."134 These conclusions are consistent with **systematic research** by Jon Bond, Richard Fleisher, and B. Dan Wood. They have focused on determining whether the presidents to whom we attribute the greatest skills in dealing with Congress were more successful in obtaining legislative support for their policies than were other presidents. After carefully controlling for other influences on congressional voting, they found **no evidence** that those presidents who supposedly were the most proficient in persuading Congress were more successful than chief executives with less aptitude at influencing legislators.135 Scholars studying leadership within Congress have reached similar conclusions about **the limits on personal leadership**. Cooper and Brady found that institutional context is more important than personal leadership skills or traits in determining the influence of leaders and that there is no relationship between leadership style and effectiveness.136 Presidential legislative leadership operates in an environment largely **beyond the president's control** and must compete with other, more stable factors that affect voting in Congress in addition to party. These include **ideology**, **personal views** and commitments on **specific policies, and** the interests of **constituencies**. By the time a president tries to exercise influence on a vote, most members of Congress have made up their minds on the basis of these other factors. Thus, a president's legislative leadership is likely to be critical only for those members of Congress who remain open to conversion after other influences have had their impact. Although the size and composition of this group varies from issue to issue, it will almost always be a minority in each chamber.

### 2ac elections (1)

#### Romney wouldn’t start a trade war with China if elected

**Politico, 9-15-12**, p. http://www.politico.com/news/stories/0912/81254.html

Mitt Romney is hoping his tough talk on China policy will win him votes — but few of his big business donors or fellow Republicans support what he’s saying or believe he’d follow through if elected.¶ And if he did, many analysts say, he’d likely spark a disastrous and counter-productive trade war that would hurt both American consumers and the workers he says he’s trying to protect. But Romney advisers say voters shouldn’t expect him to back off the tough talk if he gets elected, and other experts say fears of a “trade war” are overblown since the Chinese need the American market just as much consumers like cheap Chinese imports.

#### China won’t retaliate—no impact

Bosco 9/6—national security consultant, master of laws from Georgetown (Joseph A., 9/6/12, <http://www.washingtonpost.com/opinions/china-and-a-mitt-romney-presidency/2012/09/06/32917432-f76f-11e1-a93b-7185e3f88849_story.html>, RBatra)

First, it takes two to wage a “trade war.” When China realizes that Mr. Romney is serious about declaring it a currency manipulator (which it is), wiser counsel may well prevail in Beijing. Playing by international rules is far more in China’s interest than is retaliating against free and fair trade. China could avoid the choice between dangerous escalation and embarrassing submission by preemptively starting to free its currency before a Romney inauguration.

#### Obama will win, it’s too late to alter swing state dynamics and most voters have already decided

**Downie, 10/4/12 –** Washington Post Opinion writer, James, Obama lost the first debate, but he will still win the election, Washington Post, http://www.washingtonpost.com/blogs/post-partisan/post/obama-lost-the-first-debate-but-he-will-still-win-the-election/2012/10/04/9c3b7eb8-0deb-11e2-bd1a-b868e65d57eb\_blog.html)

And yet, the president’s supporters would be wrong to wring their hands. Fundamentally, Obama’s loss will not matter. At most, Wednesday night was a case of “too little, too late” for Romney. Yes, the polls will probably move a point or two in Romney’s direction after the first debate. But all the evidence suggests that for Romney, whether or not you believe he should be president, closing the gap and beating Obama is a bridge too far.

Consider the task facing Romney going into Wednesday’s debate: Nationally, RealClearPolitics’s poll average had him down three points; Nate Silver’s model had him down four. He had held a lead in a major poll exactly once since the end of August. The electoral college looked even worse for him: RealClear’s map gave Obama 269 electoral votes safe or leaning to Romney’s 181 (with 88 in toss-up states); HuffPost Pollster gave Obama a 290-191 lead; and Nate Silver’s model had Obama winning an average of 319 electoral votes to Romney’s 218, a comfortable margin. Even Karl Rove had 277 votes safe or leaning to Obama, with another 70 as toss-ups.

“Ah,” you say, “that may be true, but surely the gap is small enough to close? And wouldn’t the first debate be enough to bring this race back to a dead heat?” In a word, no.

Let’s start with the second question. Incumbent presidents almost always have a poor first debate: George W. Bush lost to John Kerry in 2004, for example, and Walter Mondale beat Ronald Reagan so badly in 1984 that there was a spate of articles asking if the incumbent was too old for the presidency. Yet never has a challenger’s strong first debate performance closed as large a national polling gap as Romney faced going into last night’s debate. Furthermore, most post-debate polling bumps come from previously undecided voters, of which there is a historically small amount in this campaign, thus making it even less likely that Romney could exceed past norms. And Romney would need to outdo history by quite a distance — only Harry Truman has come back from a national deficit as large or larger than Romney’s at this point in the campaign.

If Romney **would have to pull off a miracle** to close the gap in national polling, he has no shot at matching the president in the electoral college. As mentioned above, forecasters commonly predict that Obama already has a big lead of safe and leaning states. If we assume Romney will improve in the polls, there would be around nine “swing states”: Colorado, Florida, Iowa, North Carolina, New Hampshire, Nevada, Ohio, Virginia and Wisconsin. There’s one problem here for Romney: He is trailing, and has been consistently trailing, in all but two — North Carolina, where he’s held a small lead, and Florida, this election’s closest thing to a 50-50 state. Romney doesn’t need to win two out of those nine; in almost every scenario, he will need six or seven out of those nine to win, including at least two or three states where he is behind by several points more than he is nationally.

All of which brings me to the final point: Given the state of the race before last night’s debate, even most Romney backers would agree that a Romney victory would require a flawless campaign the rest of the way from Romney and a blunder or two from Obama. After six years of both these men running for and/or being president of the United States, is there really anyone out there who thinks Mitt Romney can go a month without making a single mistake? Who thinks Barack Obama, who has been playing it safe for at least several months now, will suddenly make a reckless error, as opposed to a merely lackluster performance? (Or, if you’re Sean Hannity and co., do you believe the lamestream media will suddenly forget their liberal bias and stop protecting the president while assaulting Mitt Romney?)

Seriously, does anyone believe that?

The fact is that, come October, presidential elections cannot permanently change course over a few days or hours (unlike, say, media narratives). The majority of voters have already made their decision, and the debates won’t provide enough of a boost to alter the contest’s trajectory. Sadly for Romney, the path the race is stuck on ends with his defeat.

#### Energy won’t switch votes

**Farnam, 12** (T.W. Washington Post, Energy ads flood TV in swing states, 6/27, <http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V_story.html>)

Energy issues don’t spark much excitement among voters, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy.

And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads.

The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry.

Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.”

Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag.

In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway.

When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, fewer than 1 percent mention energy.

#### No Romney traction – even if voters hate Obama’s energy policy they won’t shift to Romney

Lewis, 10/1/12 - senior contributor to The Daily Caller (Matt, The Daily Caller, “Mitt Romney’s struggle to win blue collar Ohio voters”

This sounds trivial, but it matters greatly — especially in places like Ohio.

The Atlantic’s Molly Ball is consistently a “must read,” and her latest column reinforces a point I’ve been making for a long time — that Mitt Romney is in danger of under-performing with working-class whites in key states like the Buckeye state. (Ball’s teaser says it all: “In Appalachian coal country, Romney is now viewed with nearly as much suspicion as Obama — and that may be the story of the 2012 election.”)

There is at least one substantive reason for these voters to be skeptical of Romney. While interviewing Ohio voters, Ball stumbled over an interesting blast from the past:

It turns out Romney, as governor of Massachusetts in 2003, held a press conference in front of a coal-fired power plant. “I will not create jobs or hold jobs that kill people,” he said, and then, gesturing at the facility behind him: “That plant, that plant kills people.” You can see the footage in an Obama campaign ad that’s been airing heavily here. It seems to have made an impression.

The notion that Romney would be worse for coal than Obama seems absurd. Still, Obama is using the line to effectively muddy the waters. All he really needs is for voters to conclude, “they’re both bad,” and Obama can consider that a victory. Ball sums it up thusly,

I heard it over and over again from Ohioans — the idea that Romney stands for the wealthy and not for them. Obama’s depiction of his rival as an out-of-touch rich guy, which has gotten no little assistance from Romney himself, has made a deep and effective impression with these self-consciously working-class voters.

#### And, fiat should be determined by the least restrictive means – congress is holding “pro forma sessions” - NO legislative business can occur in them

Ramsey Cox (writer for The Hill) September 24, 2012 “Congress to hold pro forma sessions until November” http://thehill.com/blogs/floor-action/senate/251313-congress-to-hold-pro-forma-sessions-until-november

Rather than being in recess for more than five weeks, both the Senate and the House decided to hold pro forma sessions until after the November elections. Both chambers will gavel in Tuesday morning for a brief session; typically, legislative business doesn't take place in pro forma sessions. At most members ask to be recognized for a speech, but rarely do. It is unclear if the legislative branch was afraid of recess appointments by the White House, yet both sides took a formal recess in August. The Senate will hold a pro forma session every Tuesday and Friday until Nov. 13 at 2 p.m. when they’ll continue work on S. 3525, the Sportsmen Act, which would increase access to federal land for hunters and fishers while also supporting conservation measures.

#### Too late to change the election- ideology

Helling ’12 (DAVE HELLING, McClatchy Newspapers Miami Herald 7-22-12 "Is the race for president already over?"

But **a growing number** of **political scientists and campaign consultants** - backed by the **latest polling data** - think the daily campaign back-and-forth **is having no significant effect on voters.** Most Americans have **locked in** their presidential decisions, polls released Thursday suggested, and the already small number of persuadable voters **shrinks by the hour**. Put another way: America could vote for president next week, and the outcome would probably be the same as it will be in November. "That's accurate, barring some really big, big event or change in the political environment," said Alan Abramowitz, a political science professor at Emory University in Atlanta, who has studied presidential voting patterns. Kenneth Warren, a political science professor at St. Louis University, agreed. "Most people have decided who they're going to vote for early on," he said. Recent polls show those who have decided are split almost evenly between Obama and Romney. In a CBS/New York Times poll, Romney led by 1 point. In a Fox News poll, he trailed Obama by 4 points. A National Public Radio poll found Obama leading by 2 points. A Gallup tracking poll over the same time period showed the race dead even. The average of polls puts the Obama advantage at 1.2 percent, according to Real Clear Politics, a political aggregation website. The incumbent has led Romney in that average by a one- to two-point margin since last October. Political scientists and consultants said there were several reasons for early presidential decision-making. In an Internet-cable-TV age, **voters are pounded with political messages daily, helping them make up their minds far in advance** of the election. An incumbent in the race makes at least one of the candidates a known quantity. And American **voters are deeply divided, further cementing their choices.**

#### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

#### Jobs report will have a bigger effect than the plan

**Reich, 10/1**/12 - Chancellor’s Professor of Public Policy at the Goldman School of Public Policy at the University of California at Berkeley (Robert, “Bigger than the debates? Friday’s jobs report” Salon,

<http://www.salon.com/2012/10/01/bigger_than_the_debates_fridays_jobs_report/>

The biggest election news this week won’t be who wins the presidential debate Wednesday night. It will be how many new jobs were created in September, announced Friday morning by the Bureau of Labor Statistics.

Rarely in the history has the monthly employment carried so much political significance. If the payroll survey is significantly more than 96,000 –- the number of new jobs created in August — President Obama can credibly claim the job situation is improving. If significantly fewer than 96,000, Mitt Romney has the more credible claim that the economy isn’t improving.

August’s household survey showed the overall rate of unemployment to be 8.1 percent in August – not bad, relative to previous rates – but that was mainly because so many Americans had stopped looking for work. (You’re deemed “unemployed” only if you don’t have a full-time job and you’re looking for work; if you’ve given up looking, you’re not counted.)

What happened to jobs in August or September – and what will happen in October (announced November 2, just days before Election Day) – have very little to do with what Obama did or didn’t do. Presidents have little to do with month-to-month changes in employment.

What’s more, the rest of the world isn’t cooperating: Much of Europe is in recession because it’s swallowed the “austerity” cool-aide. Japan is still a basket case. And China is slowing considerably.

In addition, Obama has had to grapple with a recalcitrant Republican congress, whose “number one goal,” according to Senate Minority Leader Mitch McConnell, hasn’t been to create more jobs but to make sure Obama doesn’t get a second term.

Still, evidence is accumulating that the U.S. economy has stalled. According to Commerce Department data released late last week, the economy grew at an annualized rate of only 1.3 percent between April and June. That’s down from 2 percent in the first quarter of the year. Consumer spending rose in August just .1 percent, after adjusting for inflation. Orders for durable goods (cars, TVs, other long-lasting manufactured products) dropped 13 percent, the biggest monthly drop in three years. And because incomes grew less than spending, the savings rate dropped to 3.7 percent — the lowest since April.

#### Eurozone action will outweigh the plan

**Weisenthal, 9/26**/12 - Prior to joining Business Insider in October 2008, Joe was a correspondent for paidContent.org, as well as the Opening Bell editor at Dealbreaker.com. He previously was a writer and analyst for Techdirt.com, and before that worked as an analyst for money management firm Prentiss Smith & Co (Joe, “We're Getting A Glimpse Of Barack Obama's Worst Nightmare” Business Insider, http://www.businessinsider.com/obamas-worst-nightmare-2012-9#ixzz289W0KygN)

This doesn't necessarily seem likely, but the latest turns and twists of the global economy open up a scenario whereby markets could get really ugly between now and the election.

Basically, we present a plausible scenario in which things get bad on two fronts. The scenario is based on developments over the last several days.

Here's how it could go:

First, Europe really stalls out.

Thanks to the political crisis in Spain, suddenly it's not clear if the ECB's powerful bond buying program will ever get off the ground.

Remember, the ECB has announced a plan to backstop government bonds, but it needs the countries to request aid and submit to outside fiscal supervision. Because of mass protests, and a burgeoning secession movement in Catalonia, Spanish PM Mariano Rajoy is very reluctant to ask for a bailout unless it's absolutely necessary. He'd like to delay the request as long as possible.

In addition, you have heightening squabbles over what will be done with Greece (raising the specter that it will leave the Eurozone). There are more and more reports about HUGE holds in the government's budget, and the various creditor parties are fighting about who will take the hit. The specter of Greece leaving the Eurozone is rising.

This could then start hitting markets in the US. Actually that already seems to be happening. The market's dropping. And now we no longer have an implied "put" from the Fed, since it's already blown its wad (or so it seems) with the announcement of open-ended QE.

Already, the market has been weak since QE3 was announced, and in particular, the oil & gas/basic materials stocks that people associate with reflation have been weak.

Those two sectors, which are supposed to rise on successful reflation, make up 2 out of 3 of the worst performing S&P sectors today.

This could be a nothing blip, but a series of weeks like this one (riots in Europe, which inevitably remind people about government

debt) and markets in the US reacting badly could be the "October Surprise" that Romney needs to win.

## 1ar

### exports

#### Cooperation can still be achieved without 123 agreements.

Glasgow, ‘10

[James A., Partner -- Pillsbury Winthrop Shaw Pittman LLP, 6-28, “International Scope of Small Modular Reactors and Outlook for Advanced Reactor Development International Trade Export Controls and SMRs,” http://www.uxc.com/smr/Library/Export%20Issues/2010%20-%20International%20Scope%20of%20SMRs%20and%20Outlook%20for%20Advanced%20Reactor%20Development.pdf]

• While presence or absence of a 123 Agreement is an important factor, lack of such an Agreement does not prevent the Secretary from issuing a specific authorization • DOE has issued more than a dozen specific authorizations for peaceful nuclear assistance to countries that did not have a §123 Agreement with the U.S., including USSR/Russia • “Much…cooperation can take place in the absence of bilateral 123 Agreements, since it involves the exchange of expertise, lessons learned, and best practices rather than the export of nuclear material or reactor components.” • Testimony by Assistant Secretary of State V. Van Diepen at November 2009 hearing of Senate Foreign Relations Committee

### overpop

#### Overpopulation and environmental collapse risks extinction

**Brown, 06** professor of physiology at West Virginia University (Paul, Notes from a Dying Planet, p. 3-4)

The threats we face stem from overpopulation and environmental degradation. The resulting climate change and mass extinctions are leading to ecological collapse, in which the once-robust tapestry of interrelationships among living creatures, climate, and our physical environment has been weakened and is starting to unravel. Clinical indicators of our planet’s serious illness are illustrated in the graph. I’ve adjusted the vertical scales for population, carbon dioxide (CO2), methane, temperature, and extinction of species per year so they all have a common minimum and maximum.   All the minima occurred tens of thousands of years BC, and all the maxima are now.  The state of the Earth today is unique. We’re consuming the world’s resources faster than they can be restored. The world’s population is now doubling in less than fifty years. Around mid-century the world’s population is expected to level off at eight to twelve billion people. The lower number is far too high: population must start to decline before 2050 if we are to survive. The upper limit, to put it simply, will never be reached because **we would all die first.** Because of population growth and increasing consumption, concentrations of greenhouse gases such as carbon dioxide and methane in our atmosphere are the highest in human history, as are global temperatures. This is not normal climatic fluctuation, as fossil-fuel industry shills would have you believe. The rate of species extinctions is comparable to mass extinctions that have occurred only five times before, and is likely to exceed those. The total decline of species since the Industrial Revolution will soon be worse than the mass extinction caused by the asteroid impact sixty-five million years ago off the Yucatan peninsula, which wiped out 83% of species including the dinosaurs.  Before we came along, species evolved and went extinct for billions of years, creating and filling a diversity of ecological niches. Organisms used energy from the sun to grow and reproduce, recycling the materials needed for life through an interdependent worldwide ecosystem. Mechanisms existed to maintain ecological stability, ensuring that the environment didn’t change too fast for evolution to keep up. Our biosphere recovered from calamitous events like asteroid collisions, even though only a minority of species made it through some of those catastrophes. Today’s ongoing catastrophe may eliminate all but the smallest and simplest of life forms.  Our species has flourished, but without realizing it we’ve changed our environment **too fast for other species to adapt**. A system’s stability can only be eroded so far, after which it becomes unstable. We’re approaching a point where the world’s ecosystem will change too fast even for us to adapt. We will become extinct.  It’s already too late for us to return to the world as we found it or even as it was ten years ago. We’ve wiped out too many species. But we can protect the remaining fragile stability. In a word, we must seek sustainability, which means consuming resources only as fast as they’re replenished. All the trends on our graph have to be reversed, until they’re all back to pre-industrial levels or lower. This doesn’t mean returning to a pre-industrial quality of life – in fact, we should all be able to live much better once there are fewer of us. But we have to take effective action very soon, before it’s too late.

### prolif

#### Expanding global interest generates new challenges—but effective domestic conditions ensure a lead role and solidify export policy

**Bengelsdorf and McGoldrick**, **07** [currently a Principal with the consulting firm of Bengelsdorf, McGoldrick, and Associates, held numerous senior positions in the U.S. government, including the Energy Department and its predecessor agencies, the State Department, and the U.S. Mission to the IAEA. Among his appointments, he served as the director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs. Throughout his career, Mr. Bengelsdorf contributed significantly to the development and implementation of U.S. international fuel cycle and nonproliferation policies, having participated in several White House and National Security Council studies. He was involved in the negotiation of numerous bilateral and multilateral nuclear and nonproliferation agreements, including the development of full-scope IAEA safeguards (INFCIRC/153) to implement the Nuclear, THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY A White Paper Presented by the American Council on Global Nuclear Competitiveness May 2007, <http://www.nuclearcompetitiveness.org/images/COUNCIL_WHITE_PAPER_Final.pdf>]

Consumer countries are likely to turn for support and assistance to those states possessing **the most vigorous** domestic nuclear power programs that are placing new power plant orders, extending international fuel cycle services, and maintaining leadership roles in supporting innovative improvements in advanced technologies. This suggests that the influence of the United States internationally could be enhanced significantly if the U.S. is able to achieve success in its Nuclear Power 2010 program and place several new orders in the next decade and beyond. Conversely, if the 2010 initiative falters, or if U.S. companies only are given subordinate roles in processing new plant orders, then this can only further weaken the U.S. nuclear infrastructure as well as the stature of the U.S. in the international nuclear community. Experts believe that the U.S. nuclear infrastructure is capable of sustaining the goals of the 2010 program, but this will require the resolution of a number of formidable problems, including arrangements for the acquisition of long lead time components and coping with anticipated shortages of experienced personnel. Maintaining the U.S. as a Significant Global Supplier The health of the U.S. civil nuclear infrastructure will also be crucial to the success of U.S. efforts to play a significant role as a nuclear supplier and to advance its nonproliferation objectives. There is a clear and compelling upsurge of interest in nuclear power in various parts of the world that is independent of U.S. policy and prerogatives. As a consequence, if the U.S. aspires to participate in these programs and to shape them in ways that are most conducive to nonproliferation, it will need to promote the health and viability of the American nuclear infrastructure. Perhaps more importantly, if it wishes to 23 exert a positive influence in shaping the nonproliferation policies of other countries, it can do so more effectively by being an active supplier to and partner in the evolution of those programs. Concurrent with the prospective growth in the use of nuclear power, the global nonproliferation regime is facing some direct assaults that are unprecedented in nature. International confidence in the effectiveness of nuclear export controls was shaken by the disclosures of the nuclear operations of A.Q. Khan. These developments underscore the importance of maintaining the greatest integrity and effectiveness of the nuclear export conditions applied by the major suppliers. They also underscore the importance of the U.S. maintaining effective policies to achieve these objectives. Constructive U.S. influence will be best achieved to the extent that the U.S. is perceived as a major technological leader, supplier and partner in the field of nuclear technology. As the sole superpower, the U.S. will have considerable, on-going influence on the international nonproliferation regime, regardless of how active and successful it is in the nuclear export market. However, if the U.S. nuclear infrastructure continues to erode, it will weaken the ability of the U.S. to participate actively in the international nuclear market. If the U.S. becomes more dependent on foreign nuclear suppliers or if it leaves the international nuclear market to other suppliers, the ability of the U.S. to influence nonproliferation policy will diminish. It is, therefore, essential that the United States have vibrant nuclear reactor, uranium enrichment, and spent fuel storage and disposal industries that can not only meet the needs of U.S. utilities but will also enable the United States to promote effective safeguards and other nonproliferation controls through close peaceful nuclear cooperation other countries. The U.S. should establish a high priority goal to rebuild an indigenous nuclear industry and support its growth in domestic and international markets. U.S. nuclear exports can be used to influence other states’ nuclear programs through the nonproliferation commitments that the U.S. requires. The U.S. has so-called consent rights over the enrichment, reprocessing and alteration in form or content of the nuclear materials that it has provided to other countries, as well as to the nuclear materials that are produced from the nuclear materials and equipment that the U.S. has supplied. 24 The percentage of nuclear materials, including separated plutonium, that are subject to U.S. consent rights will diminish over time as new suppliers of nuclear materials and facilities take a larger share of the international nuclear market. Unless the U.S. is able to compete effectively in the international market as a supplier of nuclear fuels, equipment and technology, the quantity of the nuclear materials around the globe that the U.S. has control over will diminish significantly in the future. This may not immediately weaken the effectiveness of the nonproliferation regime since all the major suppliers have adopted the export guidelines of the Nuclear Supplier Group. However, only the U.S., Australia and Canada have consent rights over enrichment and reprocessing of the nuclear materials subject to their agreements. Consequently, if there is a major decline in the U.S. share of the international nuclear market, the U.S. may not be as effective as it has been in helping to ensure a rigorous system of export controls. Nuclear R&D Further, the revitalization of the U.S. nuclear infrastructure will depend on the U.S. ability to provide sustained bipartisan support for nuclear R&D programs in order that they can be sustained from one administration to another. The ability of the United States to continue to make significant contributions to the improvement of safeguards, physical protection and proliferation resistance of nuclear systems is dependent, at least in part, on the continued health of the U.S. technological base. This assumes close collaboration between industry and the national laboratories, which could be increased through greater use of Cooperative Agreements between U.S. firms and national laboratories. GNEP contains some important new ideas that could advance U.S. nonproliferation objectives. Envisioned within both GNEP and the U.S.-led Generation IV Initiative is the development and deployment of nextgeneration nuclear power plant designs that, if completed, could help restore a U.S. competitive edge in nuclear system supply. As the U.S. Government expends taxpayer funds on the Nuclear Power 2010 program, the Global Nuclear Energy Partnership, the Generation IV initiative and other programs, it should consider the benefit to the U.S. industrial base and the benefit to U.S. non-proliferation posture as criteria in project design and selection where possible.

### states

#### A firm commitment to loan guarantees resolves investor uncertainty over federal restrictions

**Turnage et al, 7** – Senior Vice President, Constellation Energy Group Inc

(Joe C, and Theodore Bunting, Jr, Senior Vice President of Finance, Entergy Corp, and John F Young, Executive Vice President and CFO, Exelon Corp, and Steve Winn, Executive Vice President, NRG Energy, Inc, “Join Comments of Constellation Group, Inc, Entergy Corporation, Exelon Corporation, and NRG Energy, Inc. regarding Proposed Rule, Loan Guarantees for Projects that Employ Innovative Technologies,” addressed to Mr. Howard G Bordstrom, July 2, 2007, <http://www.lgprogram.energy.gov/nopr-comments/comment41.pdf>)

For new nuclear power plant development in the U**nited** S**tates,** Federal loan guarantees are an indispensable instrument to address a market financing gap that results from the combination of several factors including, (i)the prior nuclear plant construction cycle that was burdened by regulatory uncertaintyand resulting delays and cost overruns; (ii) perceived uncertainty of an untested (though certainly improved) licensing system**;** (iii) perceived technology risk, and (iv) an institutional loss of understanding regarding the reality of nuclear financial riskin some elements of the financial community.

#### Federal investment key to successful demonstration and licensing

**Wallace ‘5** (President of Constellation Generation Group, Mike Wallace, CQ Congressional Testimony, “NUCLEAR POWER 2010 INITIATIVE,” 4/26, lexis)

The Department of Energy's Nuclear Power 2010 program is a necessary, but not sufficient, step toward new nuclear plant construction. We must address other challenges as well. Our industry is not yet at the point where we can announce specific decisions to build. We are not yet at the point where we can take a $1.5 billion to $2 billion investment decision to our boards of directors. We do yet not have fully certified designs that are competitive, for example. We do not know the licensing process will work as intended: That is why we are working systematically through the ESP and COL processes. We must identify and contain the risks to make sure that nothing untoward occurs after we start building. We cannot make a $1.5 $2 billion investment decision and end up spending twice that because the licensing process failed us. The industry **believes** federal investment is necessary and appropriate to offset some of the risks I've mentioned. We recommend that the federal government's investment include the incentives identified by the Secretary of Energy Advisory Board's Nuclear Energy Task Force in its recent report. That investment stimulus includes: 1. secured loans and loan guarantees; 2. transferable investment tax credits that can be taken as money is expended during construction; 3. transferable production tax credits; 4. accelerated depreciation. This portfolio of incentives is necessary because it's clear that no single financial incentive is appropriate for all companies, because of differences in company-specific business attributes or differences in the marketplace - namely, whether the markets they serve are open to competition or are in a regulated rate structure. The next nuclear plants might be built as unregulated merchant plants, or as regulated rate-base projects. The next nuclear plants could be built by single entities, or by consortia of companies. Business environment and project structure have a major impact on which financial incentives work best. Some companies prefer tax-related incentives. Others expect that construction loans or loan guarantees will enable them to finance the next nuclear plants. It is important to preserve both approaches. We must maintain as much flexibility as possible. It's important to understand why federal investment stimulus and investment protection is necessary and appropriate. Federal investment stimulus is necessary to offset the higher first-time costs associated with the first few nuclear plants built. Federal investment protection is necessary to manage and contain the one type of risk that we cannot manage, and that's the risk of some kind of regulatory failure (including court challenges) that delays construction or commercial operation. The new licensing process codified in the 1992 Energy Policy Act is conceptually sound. It allows for public participation in the process at the time when that participation is most effective - before designs and sites are approved and construction begins. The new process is designed to remove the uncertainties inherent in the Part 50 process that was used to license the nuclear plants operating today. In principle, the new licensing process is intended to reduce the risk of delay in construction and commercial operation and thus the risk of unanticipated cost increases. The goal is to provide certainty before companies begin construction and place significant investment at risk. In practice, **until the process is demonstrated, the industry and the financial community cannot be assured** that licensing will proceed in a disciplined manner, without unfounded intervention and delay. **Only** the successful licensing and commissioning of several new nuclear plants (such as proposed by the NuStart and Dominion-led consortia) can demonstrate that the licensing issues discussed above have been adequately resolved. Industry and investor concern over these potential regulatory impediments may require techniques like the standby default coverage and standby interest coverage contained in S. 887, introduced by Senators Hagel, Craig and others. Let me also be clear on two other important issues: 1. The industry is not seeking a totally risk-free business environment. It is seeking government assistance in containing those risks that are beyond the private sector's control. The goal is to ensure that the level of risk associated with the next nuclear plants built in the U.S. generally approaches what the electric industry would consider normal commercial risks. The industry is fully prepared to accept construction management risks and operational risks that are properly within the private sector's control. 2. The industry's financing challenges apply largely to the first few plants in any series of new nuclear reactors. As capital costs decline to the "nth-of-a-kind" range, as investors gain confidence that the licensing process operates as intended and does not represent a source of unpredictable risk, follow-on plants can be financed more conventionally, without the support necessary for the first few projects. What is needed limited federal investment in a limited number of new plants for a limited period of time to overcome the financial and economic hurdles facing the first few plants built. In summary, we believe the industry and the federal government should work together to finance the first-of-a-kind design and engineering work and to develop an integrated package of financial incentives to stimulate construction of new nuclear power plants. Any such package must address a number of factors, including the licensing/regulatory risks; the investment risks; and the other business issues that make it difficult for companies to undertake capital-intensive projects. Such a cooperative industry/government financing program is a necessary and appropriate investment in U.S. energy security.

### impact d

#### Relations will not collapse. We promise

**Rosecrance and Qingguo 2010** – \*political science professor at Cal and senior fellow at Harvard’s Belfer Center for Science and International Affairs, former director of the Burkle Center for International Relations at UCLA, \*\*PhD from Cornell, Professor and Associate Dean of the School of International Studies of Peking University (Jia Qingguo and Richard Rosecrance, Global Asia, 4.4, “Delicately Poised: Are China and the US Heading for Conflict?”, <http://www.globalasia.org/l.php?c=e251>, WEA)

To begin with, after years of interaction, China and the US have developed a shared stake in cooperation. Their relationship has deepened to the point where their economic futures have become closely interlinked. Western demand, principally from the US, sustains a whole range of Chinese industries. Chinese investments support America’s deficit financing, with China holding more than $1 trillion of US government debt. The US, meanwhile, contributes greatly to China’s foreign trade surplus. If America stopped buying Chinese goods, it would put a serious crimp in Chinese economic growth. Chinese sovereign wealth funds are also moving into the US financial market to rebalance the amount of foreign direct investment on each side.   
The Emergence of Shared Values   
Chinese-American ties now range well beyond economics. As major beneficiaries of existing international arrangements, both China and the US have an important stake in many areas, including defending a free trade system, maintaining international peace and stability, opposing proliferation of weapons of mass destruction, fighting terrorism, ensuring secure energy supplies and reversing global warming. In addition, as a result of changes within China, the two countries increasingly find themselves sharing similar aspirations in the world.

#### Romney is all talk- won’t actually crack down on China

NYT 12 (New York Times, John Hardwood, writer, “The Electoral Math of Romney’s Stance on Trade With China”, 3/22, http://www.nytimes.com/2012/03/23/us/politics/mitt-romneys-stance-on-china-trade.html?\_r=1&pagewanted=all)

WASHINGTON — Among all the elements of Mitt Romney’s 59-point economic plan, his vow to crack down on China’s trade policy would seem the most out of place. That is not because his promise to label China a “currency manipulator” and impose tariff penalties is unique. Plenty of politicians in both parties talk tough about Beijing. What is unusual is that Mr. Romney, a former financial executive identified with Republicans’ free-trade, pro-business wing, has promised to go further than Presidents Obama or George W. Bush in confronting China. Some other business-friendly Republicans warn that his approach could set off a counterproductive trade war that would damage the United States economy. The political question is whether Mr. Romney’s stance can attract enough votes to give him the chance to put it into effect. That question echoes through Republican primaries, in which he has struggled to connect with working-class conservatives, and a possible general election against Mr. Obama. Republican and Democratic strategists alike say that confronting China can play effectively to an anxious public’s sense of economic grievance. The Obama administration has recently lodged a complaint with the World Trade Organization against China’s handling of crucial rare earth mineral exports, and imposed tariffs on Chinese solar panels to counter what it considers unfair subsidies by Beijing. “With blue-collar voters specifically, there’s a perception that we have an economic adversary in China that doesn’t play by the rules,” said Geoff Garin, a Democratic pollster. And the concern “cuts across socioeconomic lines,” said Tony Fabrizio, a Republican pollster, who said higher-income voters fear that China’s ownership of United States government debt threatens American security. Yet prominent figures who generally share Mr. Romney’s economic outlook have criticized his stance, which the Wall Street Journal editorial page called “Romney’s China Blunder.” Business leaders, while pressing for China to open its markets and protect intellectual property, caution that labeling China a currency manipulator could backfire, harming those efforts. Jon M. Huntsman Jr., who was ambassador to China before embarking on his failed bid for the Republican presidential nomination, accused Mr. Romney of “total pandering” on the issue before exiting the race and endorsing him. Rick Santorum, now competing with Mr. Romney for blue-collar votes, has taken a similar view. “We all know Mitt Romney will do and say anything to get votes,” said Hogan Gidley, Mr. Santorum’s communications director. Mr. Obama’s advisers called Mr. Romney’s stance hypocritical. A Romney family blind trust owns a stake in an investment fund established by his former company, Bain Capital, that has bought a Chinese video surveillance company. And in his 2010 book, “No Apology,” Mr. Romney criticized Mr. Obama for levying a trade complaint against Chinese tire exports. Accusing Mr. Obama of acting to reward union supporters, he wrote, “Protectionism stifles productivity.” Mr. Romney’s China currency stance “is about as authentic as his brief flirtation with cheesy grits,” said David Axelrod, Mr. Obama’s top political strategist. “When you build a career around outsourcing, slashing jobs and wages, and profiting handsomely off of bankrupting companies, I don’t think people are going to be moved by what is an **obvious election-year conversion**.” One Romney adviser, Vin Weber, initially wondered whether the position reflected political calculation. When he joined internal discussions about Mr. Romney’s forthcoming economic plan last year, Mr. Weber said he sought to persuade other economic advisers to abandon the promised currency crackdown, which he still considers a policy mistake. Soon Mr. Weber was making that case directly to the candidate — who rejected the appeal and insisted his policy is the right one. “This is directly from him,” said Mr. Weber, a Washington lobbyist and former Republican congressman from Minnesota. “He believes it will strengthen his hand substantially. Mitt Romney is a person who sees himself as a successful negotiator.” Underpinning Mr. Romney’s argument is his assertion that recent presidents of both parties have been “played like a fiddle” by Chinese leaders. By keeping the yuan’s value lower against the dollar than market forces would dictate, Beijing makes exports to the United States cheaper and imports from the United States more expensive. In a Republican debate last year, Mr. Romney said China’s interest in smooth relations with a mammoth customer like the United States would preclude his actions from backfiring. “You think they want to have a trade war?” Mr. Romney said. “If you are not willing to stand up to China, you will get run over by China, and that’s what’s happened for 20 years.” That assertion grates on veterans of the Bush administration, which in 2006 began a “strategic economic dialogue” with China led by Treasury Secretary Henry M. Paulson Jr., a former chairman of Goldman Sachs. The Obama administration has extended that dialogue, pressing Beijing to raise the value of the yuan while stopping short of declaring China a currency manipulator. “Both the Bush and Obama administrations have been as aggressive as possible while protecting the American people,” said Neel T. Kashkari, a Bush administration Treasury official now at Pimco, the giant bond-trading firm. “Launching a trade war with China would hurt us as much as it would hurt them.” Mr. Romney’s economic plan makes it sounds as if he is willing to take that risk. It lists the currency crackdown among five executive orders he pledges to issue on “Day 1” of his presidency. But a close reading of the language suggests **he has left himself an out**. It pledges to label China a currency manipulator “if China does not quickly move to float its currency.” China has already been raising the value of its currency against the dollar somewhat in recent years, including by 4.7 percent in 2011. Some experts on China policy predict a President Romney would find a way to sidestep his pledge once electioneering gave way to governance. “It is a campaign, after all,” said Nicholas R. Lardy, a fellow at the Peterson Institute for International Economics. “My forecast is that if Romney becomes president there will be **little or no change in our China policy**.”

#### China won’t retaliate—no impact

Bosco 9/6—national security consultant, master of laws from Georgetown (Joseph A., 9/6/12, <http://www.washingtonpost.com/opinions/china-and-a-mitt-romney-presidency/2012/09/06/32917432-f76f-11e1-a93b-7185e3f88849_story.html>, RBatra)

First, it takes two to wage a “trade war.” When China realizes that Mr. Romney is serious about declaring it a currency manipulator (which it is), wiser counsel may well prevail in Beijing. Playing by international rules is far more in China’s interest than is retaliating against free and fair trade. China could avoid the choice between dangerous escalation and embarrassing submission by preemptively starting to free its currency before a Romney inauguration.

#### Extinction genetically impossible and ahistorical

**Posner 2005** (Richard A., Judge U.S. Court of Appeals 7th Circuit, Professor Chicago School of Law, January 1, 2005, Skeptic, Altadena, CA, Catastrophe: Risk and Response, http://goliath.ecnext.com/coms2/gi\_0199-4150331/Catastrophe-the-dozen-most-significant.html#abstract)

Yet the fact that Homo sapiens has managed to survive every disease to assail it in the 200,000 years or so of its existence is a source of genuine comfort, at least if the focus is on extinction events. There have been enormously destructive plagues, such as the Black Death, smallpox, and now AIDS, but none has come close to destroying the entire human race. There is a biological reason. Natural selection favors germs of limited lethality; they are fitter i

n an evolutionary sense because their genes are more likely to be spread if the germs do not kill their hosts too quickly. The AIDS virus is an example of a lethal virus, wholly natural, that by lying dormant yet infectious in its host for years maximizes its spread. Yet there is no danger that AIDS will destroy the entire human race. The likelihood of a natural pandemic that would cause the extinction of the human race is probably even less today than in the past (except in prehistoric times, when people lived in small, scattered bands, which would have limited the spread of disease), despite wider human contacts that make it more difficult to localize an infectious disease. The reason is improvements in medical science. But the comfort is a small one. Pandemics can still impose enormous losses and resist prevention and cure: the lesson of the AIDS pandemic. And there is always a lust time. That the human race has not yet been destroyed by germs created or made more lethal by modern science, as distinct from completely natural disease agents such as the flu and AIDS viruses, is even less reassuring. We haven't had these products long enough to be able to infer survivability from our experience with them. A recent study suggests that as immunity to smallpox declines because people am no longer being vaccinated against it, monkeypox may evolve into "a successful human pathogen," (9) yet one that vaccination against smallpox would provide at least some protection against; and even before the discovery of the smallpox vaccine, smallpox did not wipe out the human race. What is new is the possibility that science, bypassing evolution, will enable monkeypox to be "juiced up" through gene splicing into a far more lethal pathogen than smallpox ever was.

### link

#### Public won’t pin the plan on Obama

Mendelson ’10

(Nina A., Disclosing “Political” Oversight of Agency Decision Making, 108 Mich. L. Rev. 1127 (2010).)

Even if presidential supervision of agency decisions is well known to the voting population, holding a President accountable for particular agency decisions is hard enough, given the infrequency of elections, the number of issues typically on the agenda at the time of a presidential election, presidencies that only last two terms, and presidential candidates who are vague about how the administrative state would run. 175 It is all the more difficult if the public does not know what influence the President may have had or may end up having on particular agency decisions. “To the extent that presidential supervision of agencies remains hidden from public scrutiny, the President will have greater freedom to [assist] parochial interests.” 176

# r9 neg v. michigan state hr

## 1nc

### 1nc topicality

#### Interpretation:

#### Increase requires specification

**OED, 89** (Oxford English Dictionary, 2nd edition, Online through Emory)

increase, v.

3. To become greater in some **specified** quality or respect; to grow or advance in.

#### Substantial is meaningful with firm basis

**WordNet, 6** (WordNet® 3.0, © 2006 by Princeton University. Dictionary.reference.com/ browse/substantial)

Substantial, adjective

 2. having a firm basis in reality and being therefore important, meaningful, or considerable; "substantial equivalents"

#### Incentives require distinct mechanisms—not just encouragement

**Marbek Resource Consultants, 6** (Report prepared for the Canadian Council of Ministers of the Environment “NATIONAL EXTENDED PRODUCER RESPONSIBILITY (EPR) WORKSHOP,” 9/27, http://www.ccme.ca/assets/pdf/epr\_wkshp\_rpt\_1376\_e.pdf

The suggestion was made, and supported by others, that the word “incentives” for producers be replaced with the word “encourage”, since the term “incentive” usually **implies a particular mechanism** (#1).

#### Financial incentives cannot be discussed without specification of type

**Webb, 93** – lecturer in the Faculty of Law at the University of Ottawa (Kernaghan, “Thumbs, Fingers, and Pushing on String: Legal Accountability in the Use of Federal Financial Incentives”, 31 Alta. L. Rev. 501 (1993)  Hein Online)

In this paper, "**financial incentives**" are taken to mean disbursements 18 of public funds or contingent commitments to individuals and organizations, intended to encourage, support or induce certain behaviours in accordance with express public policy objectives. They take the form of grants, contributions, repayable contributions, loans, loan guarantees and insurance, subsidies, procurement contracts and tax expenditures.19 Needless to say, the ability of government to achieve desired **behaviour may vary with the type of incentive** in use: up-front disbursements of funds (such as with contributions and procurement contracts) may put government in a better position to dictate the terms upon which assistance is provided than contingent disbursements such as loan guarantees and insurance. In some cases, the incentive aspects of the funding come from the conditions attached to use of the monies.20 In others, the mere existence of a program providing financial assistance for a particular activity (eg. low interest loans for a nuclear power plant, or a pulp mill) may be taken as government approval of that activity, and in that sense, **an incentive to encourage that** type of **activity** has been created.21 Given the wide variety of incentive types, it will not be possible in a paper of this length to provide anything more than a **cursory discussion** of some of the main incentives used.22 And, needless to say, the comments made herein concerning accountability apply to differing degrees depending upon the type of incentive under consideration.

By **limiting the definition** of financial incentives to initiatives where public funds are either disbursed or contingently committed, a large number of regulatory **programs with incentive effects** which exist, but in which no money is forthcoming,23 **are excluded** from direct examination in this paper. Such programs might be referred to as indirect incentives. Through elimination of indirect incentives from the scope of discussion, the definition of the incentive instrument becomes both **more manageable and** more **particular**. Nevertheless, it is possible that much of the approach taken here may be usefully applied to these types of indirect incentives as well.24 Also excluded from discussion here are social assistance programs such as welfare and ad hoc industry bailout initiatives because such programs are not designed primarily to encourage behaviours in furtherance of specific public policy objectives. In effect, these programs are assistance, but they are not incentives.

#### Vote neg—now is too late to specify financial incentives type:

#### 1. Ground – “incentives” is the direct object of topical action, ALL negative strategies are premised off of it and clarification makes them a conditional moving target.

#### 2. Topic education—also turns solvency

**Arvizu, 7** - Director National Renewable Energy Laboratory (Dan, CQ Congressional Testimony, “ENCOURAGING SOLAR ENERGY,” 6/19, lexis

We applaud the Committee for its continuing examination of solar and other sources of renewable electricity and fuels. If we are to ensure the nation receives the full range of benefits that renewable energy technologies can provide, we will need a carefully balanced blend of new technology, market acceptance and government policies. It is not a question of whether to rely solely on the market, or on new research, or on government action, as we work to solve our energy problems. To accelerate deployment of renewable energy technologies, we need to effectively combine all three. It's also crucial that this mix of technology, markets and policies be crafted so that each works in conjunction with the others. The reality is that distinct renewable energy technologies - be they solar photovoltaic, solar thermal, wind, biomass power, biofuels or geothermal - are in different places in terms of their economics, technological maturity and market acceptance. While a broad range of policies are needed to spur on these varied technologies, **the specifics of** policies and **incentives** to be enacted ideally must be tailored to fit the unique requirements of each of the systems and devices we are seeking to deploy.

### 1nc states

#### The 50 state of the united states and relevant federal territories should substantially increase financial support targeted exclusively towards fusion energy production in the United States

#### State incentives for first movers will decrease overall costs

**Rosner, 11** - Robert Rosner is an astrophysicist and founding director of the Energy Policy Institute at Chicago. He was the director of Argonne National Laboratory from 2005 to 2009 (Robert, “Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S.” November, <http://epic.uchicago.edu/sites/epic.uchicago.edu/files/uploads/SMRWhite_Paper_Dec.14.2011copy.pdf>)

Preliminarily, the study team used a conservative learning rate of 10% for capital (fixed) costs and a 2-3% learning rate for variable costs (operations and maintenance). 29 Ten percent learning rates mean that costs will be reduced by 10% for every doubling either in the number of modules or plants. 30 The learning rate was drawn from the 2004 study, and was influenced by the learning experience drawn from Navy shipbuilding. The study team applied the same learning rate to all capital cost centers. Further research will be required to elucidate the learning rates for each of the cost centers.

5.1.1 LEAD SMR Plants

For modeling purposes, the so-called “first-of-the-first” SMR deployment was characterized as the LEAD SMR plant. The LEAD plant likely would be custom-built, but based on the design that ultimately would be built in a factory. Consequently, the overnight capital cost for the LEAD plant was expected to be significantly higher than a NOAK SMR plant that incorporated the benefits of the learning process in a factory setting. The overnight cost of the LEAD plant was projected to be in the range of $7,000-11,500/kW, significantly higher than the estimated overnight cost of $4,700/kW for the NOAK plant. The LEAD plant is assumed to be fully populated with six modules. The cost estimate for the LEAD plant is conservative, emblematic of the inability, at the start of this enterprise, to establish the best procurement, manufacturing, and delivery system at the time of the construction of this first set of modules. This estimate may pose a challenge to potential “first movers” in the industry, but it is not insurmountable. This barrier can be overcome by means of a combination of vendor pricing schemes, equity sharing, power purchase and sales arrangements, state and local government incentives, and private sector incentives. Some of these possibilities are discussed later in this paper.

### 1nc elections

#### Obama will win but it will be close

**Blumenthal, 10/1/12** - senior polling editor of the Huffington Post and the founding editor of Pollster.com (Mark, New 2012 Polls Show Little Change In State Of Race, http://www.huffingtonpost.com/2012/10/01/2012-polls-obama-romney\_n\_1928472.html?utm\_hp\_ref=elections-2012)

WASHINGTON -- With attention turning to the first of three upcoming national debates, new polls show President Barack Obama continuing to hold a narrow lead over Republican nominee Mitt Romney, both nationwide and in the key battleground states that are likely to decide the election. Two new national surveys released on Monday morning both show a slightly closer race than most other recent polls, although those new results are consistent with previous surveys from the same organizations, indicating that Obama's September lead is holding. The new Washington Post/ABC News survey finds Obama leading by just 2 percentage points nationwide (49 percent to 47 percent) among the voters deemed most likely to vote. But that result was no different than their previous survey, taken just after the Democratic convention three weeks ago, which showed Obama with a 1-point edge (49 percent to 48 percent). However, among all registered voters nationwide, the new Post/ABC poll shows Obama leading by 5 percentage points (49 percent to 44 percent), again the same margin as their survey found three weeks ago. The Post also reports that Obama's lead over Romney is larger (52 percent to 41 percent) among a subset of likely voters **in swing states**. Similarly, a new Politico/George Washington University Battleground poll also finds Obama leading by 2 percentage points among likely voters (49 percent to 47 percent), a finding essentially unchanged from the 3-point Obama margin (50 percent to 47 percent) found in their previous survey. The four results have been collectively more favorable to Romney than those produced by other recent national polls, and more importantly, they have shown no statistically meaningful trend in September. The HuffPost Pollster tracking model, which draws on all national and state-level polling and corrects for consistent "house effect" differences among pollsters, continues to give Obama a slightly larger, 4 percentage point lead over Romney. Similarly, a handful of new statewide surveys released over the weekend shows results consistent with a 3- to 4-point Obama lead nationwide. In Iowa, a new Des Moines Register Iowa poll found Obama leading by 4 percentage points (49 percent to 45 percent), exactly the same margin as the Pollster tracking model. In Ohio, an automated recorded-voice survey by the Democratic-affiliated firm Public Policy Polling gives Obama a 4 percentage point advantage, while a new Columbus Dispatch mail-in survey gives Obama a 9-point lead. Not surprisingly, Obama's lead on the Pollster tracking model falls somewhere in between. Finally, another new PPP poll from North Carolina shows a dead-even race, with each candidate at 48 percent -- again, consistent with a similarly close margin on HuffPost's tracking model. North Carolina has been the closest of the 50 states over the last three weeks. Thus, the combination of national and statewide polling continues to show Obama leading Romney by statistically meaningful margins in all of the battleground states except North Carolina. Were he to carry all of the states where he is currently leading, Obama would win 332 electoral votes -- far more than the 270 needed to win. Romney currently leads in states accounting for 191 electoral votes. Can Wednesday night's nationally televised debates between Obama and Romney, the first of three to be held between now and late October, be a "game changer" for Romney? Not likely, according to George Washington University political scientist John Sides. "When it comes to shifting enough votes to decide the outcome of the election," Sides writes in the Washington Monthly, "presidential debates have rarely, if ever, mattered." Sides cites research by political scientists Robert Erikson and Christopher Wlezien, who studied polling from every election from 1952 to 2008 and found that while debates sometimes nudge results, they rarely produce substantial changes in voter preferences. Erikson and Wlezien found that since 1960, the leader in the polling before the debates remained the leader after the debates. The most significant before-and-after debate shift was toward Gerald Ford in his 1976 race against Jimmy Carter. However, as Erikson and Wlezien note, "Carter's support was in steady decline" during the final month of the race. It is worth remembering that while Obama enjoys a statistically meaningful lead in national polling, his margin remains relatively modest compared to past elections. So while a "nudge" toward Romney on the order of what debates produced in 1980, 2000 or 2004 might not be enough to move Romney ahead, it could make for a much closer race.

#### Fusion is perceived as nuclear power

**Economist, 10** (“Expensive Iteration: A huge international fusion-reactor project faces funding difficulties” 6/22, <http://www.economist.com/node/16635938>)

VIABLE nuclear fusion has been only 30 years away since the idea was first mooted in the 1950s. Its latest three-decade incarnation is ITER, a joint effort by the European Union (EU), America, China, India, Japan, Russia and South Korea to construct a prototype reactor on a site in Cadarache, France, by 2018. If all goes to plan, in about 30 years it will be reliably producing more energy than is put in. The International Thermonuclear Experimental Reactor became plain ITER following public anxiety about anything that has “thermonuclear” next to “experimental” in its name. ITER aims to produce energy by fusing together the nuclei of hydrogen atoms, confined in a magnetic field at high temperatures—a process akin to that which powers the sun. For all its cosmic ambition, ITER has run into the earthiest of difficulties: spiralling costs. The project was never going to be cheap. Initial projections in 2006 put its price at €10 billion ($13 billion): €5 billion to build and another €5 billion to run and decommission the thing. Since then construction costs alone have tripled.

#### Nuclear power is unpopular with republicans, democrats, independents and a majority of women voters

Cooper, 11  (Michael, National Correspondent @ NYT, 3/22, http://www.nytimes.com/2011/03/23/us/23poll.html)

Finding places to build new plants could also prove difficult: more than 6 in 10 of those polled said they would not approve of a nuclear plant in their community. Support was highest in the South, where plans are under way for new plants in South Carolina and Georgia, and in the Midwest.

 Attitudes toward nuclear power varied along partisan and gender lines, the poll found.

A slim majority of Republicans said they approved of building more nuclear plants, while majorities of Democrats and independents disapproved. Republicans were also more likely to see the existing nuclear power plants as safe, and were more likely to say that the federal government was prepared to handle an accident, though most still said the government was not ready for such an emergency.

And Republicans were less likely to disapprove of new nuclear plants in their areas: 50 percent of them said they did not want new nuclear plants nearby, compared with 69 percent of Democrats and 65 percent of independents.

There was also a gender divide: while a majority of men said they approved of new nuclear plants, most women disapproved. Women were also significantly less likely than men to say that the benefits of nuclear power outweighed the risks, more likely to say that they were “very” concerned about a major accident and more likely to say that the events in Japan made them more afraid that a nuclear accident could occur in the United States.

#### Romney crushes Russia relations

The **Christian Science Monitor, 10-26-11**, p. http://www.alaskadispatch.com/article/putin-and-russian-empire-can-us-russian-relations-survive?page=0,1

Russia's foreign policy community is watching with growing nervousness as leading Republicans in the US, including at least one top contender for the party's presidential nomination, turn their ire against Barack Obama's already troubled "reset" in US-Russian relations, which the Kremlin sees as vital to its future plans for repairing Russian influence in the world.

Republicans have been critical all along of Mr. Obama's policy of building strong, practical relations with Moscow while soft-peddling US disapproval of Kremlin power abuses and human rights violations. But as recently as last December, more than a dozen Republican senators joined Democrats to win the needed two-thirds Senate ratification of the START nuclear arms reduction accord, which was understood in Moscow as a sign that pragmatism would always prevail in Washington.

Now, Russian experts do not seem so sure.

Since former president Vladimir Putin decided to shoulder aside his hand-picked successor, Dmitry Medvedev, and seek a fresh term as Russia's supreme leader, the tone of discussion about Russia in the US has grown much harsher, many note.

Mr. Putin's recently publicized plan to establish a "Eurasian Union" – a strong economic, and potentially political, alliance of former Soviet states – has rekindled fears among many in the West that Russia's strategic goal is to bring back the USSR and return to its historic rivalry with the US.

"We had hoped that the reset with the US might help Russia move into a friendlier, closer relationship with the West, but that seems to be fading fast," says Viktor Kremeniuk, deputy director of the official Institute of USA-Canada Studies in Moscow. "Now it seems the general opinion in the US is that Russia is fast becoming an authoritarian state with the scarecrow figure of Putin as its next president. It's all starting to feel a bit hopeless."

In a Washington Post interview earlier this month, Republican presidential contender Mitt Romney, often seen as moderate, is quoted as saying that Putin "dreams of rebuilding the Russian empire." Obama's reset of relations "has to end ... we have to show strength," Mr. Romney added.

Reining in Russian ambitions?

At a Washington conference Tuesday, Republican House Speaker John Boehner slammed Russia's "use of old tools and old thinking" as an attempt "to restore Soviet-style power and influence," and called for tougher measures to rein in Russian ambitions. At the same meeting, Garry Kasparov, a leader of the banned Other Russia opposition movement, urged Americans to heed Ronald Reagan's advice and treat Putin's Russia as an "evil empire" beyond the pale of civilized nations.

The current cold war-style spat between Moscow and Washington over the suspicious death of Sergei Magnitsky, an anticorruption lawyer who died after being denied medical treatment in a Russian remand prison two years ago, clearly illustrates the reasons Moscow prefers Obama to any Republican who might come into the White House.

A bill currently before the US Senate, the Sergei Magnitsky Rule of Law Accountability Act of 2011, and heavily supported by Republicans, would impose tough visa restrictions and financial penalties on a list of Russian officials deemed to be implicated in his fate.

But the US State Department has moved to preempt the bill by issuing its own "secret" list of proscribed officials, without imposing any financial sanctions, and connecting it with global human rights policies rather than a measure specifically targeted at Russia. Last weekend Moscow announced its own list of US citizens allegedly implicated in human rights abuses, who would be denied entry to Russia.

"On the surface it looks like a bad dispute, but actually we see the actions of the Obama administration as proof that it is committed to the reset," says Dmitry Suslov, an expert with the Council on Foreign and Defense Policies, an influential Moscow think tank. "The Senate bill is purely anti-Russian, and for the time being at least, Obama has managed to blunt this. It's greatly appreciated in Moscow.... We know that if any of the current Republican presidential nominees makes it to the White House, things will go very badly for the US-Russian relationship."

#### Extinction

**Collins & Rojansky, 10** – \* U.S. Ambassador to the Russian Federation from 1997 to 2001, AND \*\*deputy director of the Russia and Eurasia Program at the Carnegie Endowment (8/18/10, James F. Collins, Matthew Rojansky, Foreign Policy, “Why Russia Matters,” http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=41409, JMP)

A year and a half after Barack Obama hit the "reset" button with Russia, the **reconciliation is still fragile, incomplete, and politically divisive**. Sure, Russia is no easy ally for the United States. Authoritarian yet insecure, economically mighty yet technologically backward, the country has proven a challenge for U.S. presidents since the end of the Cold War. Recent news hasn't helped: The arrest in July of a former deputy prime minister and leader of the Solidarity opposition movement, Boris Nemtsov, provoked some of the harshest criticism of Russia yet from the Obama administration. Then last Wednesday, Russia announced that it had moved anti-aircraft missiles into Abkhazia, the region that broke off from Georgia during the August 2008 war. The announcement was hardly welcome news for the United States, which has tried to defuse tensions there for the last 24 months.

Yet however challenging this partnership may be, Washington can't afford not to work with Moscow. Ronald Reagan popularized the phrase, "Trust, but verify" -- a good guiding principle for Cold War arms negotiators, and still apt for today. Engagement is the only way forward. Here are 10 reasons why:

1. **Russia's nukes are still an existential threat.**

Twenty years after the fall of the Berlin Wall, Russia has thousands of nuclear weapons in stockpile and hundreds still on hair-trigger alert aimed at U.S. cities. This threat will not go away on its own; cutting down the arsenal will require direct, bilateral arms control talks between Russia and the United States. New START, the strategic nuclear weapons treaty now up for debate in the Senate, is the latest in a long line of bilateral arms control agreements between the countries dating back to the height of the Cold War. To this day, it remains the only mechanism granting U.S. inspectors access to secret Russian nuclear sites. The original START agreement was essential for reining in the runaway Cold War nuclear buildup, and New START promises to cut deployed strategic arsenals by a further 30 percent from a current limit of 2,200 to 1,550 on each side. Even more, President Obama and his Russian counterpart, Dmitry Medvedev, have agreed to a long-term goal of eliminating nuclear weapons entirely. But they can only do that by working together.

2. **Russia is a swing vote on the international stage.**

As one of the five permanent members of the U.N. Security Council, Moscow holds veto power over any resolution that the body might seek to pass -- including recent efforts to levy tougher sanctions on Iran or, in 2009, against North Korea following that country's second nuclear test. Russian support for such resolutions can also help persuade China and others not to block them. The post-reset relationship between Moscow and Washington works like a force multiplier for U.S. diplomacy. Russia plays an equally crucial role in the G-8 and G-20 economic groups, helping to formulate a coordinated approach in response to economic threats. In 2008, for example, Russia supported a G-20 resolution promising to refrain from protectionism and avoid new barriers to investment or trade.

3. Russia is big.

The country's borders span across Europe, Central and East Asia, and the Arctic -- all regions where the United States has important interests and where it cannot afford destructive competition. With an ongoing counterinsurgency campaign in Afghanistan, the United States has a strong interest in Central Asian stability and relies on Russia not only for direct assistance with logistics and information sharing, but to help manage threats like the recent political upheaval and sectarian violence in Kyrgyzstan. In the former Soviet space, Moscow's historical ties to newly independent states are still fresh and powerful. Moscow is the linchpin to resolving "frozen conflicts" that prevent countries like Moldova, Georgia, and Azerbaijan from prospering economically and moving toward European Union membership. Recently, for example, Moscow signaled renewed interest in resolving frozen conflicts in Nagorno-Karabakh and Transnistria. And despite recent troop movements into Abkhazia, a negotiated settlement is still very possible, one that returns some territory to Georgia but preserves its autonomous status, along with that of its fellow breakaway republic, South Ossetia.

4. Russia's environment matters.

As the catastrophic fires across Western Russia have dramatically illustrated, Russia is both a victim of global climate change and a steward of natural resources -- including many of the forests now badly burned -- **needed to reverse the global warming trend.** With more than one-tenth of the world's total landmass, vast freshwater and ocean resources, plus deposits of nearly every element on the periodic table, Russia is an indispensable partner in the responsible stewardship of the global environment. On climate change, there is work to be done, but progress is evident. Russia today is the world's fourth-largest carbon emitter, but as a signatory to the Copenhagen Accord, it has pledged to reduce emissions to 20 to 25 percent below 1990 levels. Another black spot is Russia's use of "flaring" -- a technique that burns natural gas into the open atmosphere during oil extraction, but Medvedev agreed to capture 95 percent of the gas currently released through flaring. Last year he also signed Russia's first law on energy efficiency, which takes such steps as requiring goods to be marked according to their energy efficiency and banning incandescent light bulbs after 2014. True, most of Russia's other commitments are short on deadlines and concrete deliverables. But like China's cleanup for the Beijing Olympics, Moscow could transform resolve into reality with surprising speed, given the right amount of international engagement. And in the meantime, Russia's natural climate-cleaning properties are vast; the Siberian provinces alone contain more clean oxygen-producing forests and reserves of freshwater than continental Europe.

5. Russia is rich.

As the "R" in the famous BRIC grouping of emerging economies, Russia is the 12th-largest market in world, with the third-largest foreign currency reserves. And the country's role in world markets is only growing. Russia is a big player in commodity trading, the country boasts a volatile but increasingly attractive stock exchange, and it is open to foreign investment -- even in state-owned industries. Russian businesses are increasingly looking abroad to form strategic partnerships, acquire assets, and sell their products. And as a country that felt the global financial crisis viscerally -- economic growth fell by almost 8 percent in 2009 -- Russia has a strong interest in making sure there is no repeat. Despite occasional retrenchments, such as the ban on grain exports after the summer fires, Russia is committed to becoming a free-trading World Trade Organization member, and wants more access to U.S. and European technology and management know-how to drive its modernization. Excessive bureaucracy and widespread corruption are the biggest challenges to Russia's further economic growth, but these are already top talking points in Medvedev's modernization drive, and engagement with more transparent Western countries such as the United States can only help.

6. One word: energy.

The American way of life depends on stable and predictable commodity prices -- gasoline, natural gas, and coal in particular -- and Russia plays a large role in the global production and pricing of these fossil fuels. Russia alone possesses roughly one-quarter of the world's known gas reserves, and it is currently responsible for over a fifth of global exports. It is the second largest oil-producing state after Saudi Arabia and has the second-largest coal reserves after the United States. The even better news for Washington is that Russia is not a member of OPEC, the cartel of oil-producing countries. This gives the country far more freedom to focus on increasing exports rather than reducing them to keep prices down. When it comes to bringing supply to market, many will no doubt remember the so-called gas wars between Russia and Ukraine and Russia and Belarus that left Eastern Europe in the cold several times in recent years. Much of the trouble is attributable to the legacy of Soviet energy infrastructure in Russia's western neighbors, which put a choke-hold on Russia's gas pipelines. Moscow is currently working with the United States, China, and Western Europe to find a way around this problem, which will entail building new pipelines through the Baltic Sea, Black Sea and Siberia.

7. **Russia is a staunch ally in the war on terror** (and other scourges).

Even during the dark days after the 2008 Russia-Georgia war, Moscow and Washington cooperated effectively on counterterrorism, counternarcotics, infectious disease prevention and response, and other shared security priorities. Recently, the two have worked together under the auspices of the Bilateral Presidential Commission to coordinate relief strategies for catastrophes such as the Haiti earthquake and the violence in Kyrgyzstan. Both Washington and Moscow recognize that swift, well-organized responses to such crises are key to preventing weaknesses from being exploited -- for example by extremist groups who are happy to fill the vacuum of government authority. Russia is also a critical partner in U.S. law enforcement efforts to defeat organized crime and terrorism financing. The two countries are currently working to map smuggling routes in Central Asia. And Russia has shared information with the United States on the informal financial networks used to fund Taliban and Afghan warlords.

8. The roads to Tehran and Pyongyang go through Moscow.

Russia maintains unique relationships with Iran and North Korea -- both top concerns on Washington's nuclear nonproliferation radar. In the past, the Kremlin has used its leverage to keep the path open for negotiations, sending senior diplomats to Tehran and offering carrots such as civilian nuclear assistance and weapons sales (though it has deferred the sale of advanced S-300 ground-to-air missiles that could be used to blunt a U.S. or Israeli air strike). Now more than ever, Washington needs allies with that kind of leverage to help punish violators and **discourage cascading nuclear proliferation worldwide.** Leading by example on nonproliferation is also a must; as the world's biggest nuclear powers, the United States and Russia are looked to as the standard-setters. If they fail to ratify their latest modest step forward on bilateral nuclear arms control, it will be difficult to push other countries to take similar counter-proliferation measures.

9. **Russia can be a peacemaker.**

Moscow has the potential to play a role in the settlement of key regional conflicts -- or if it chooses, to obstruct progress. Russia is a member of the Middle East "Quartet," the six-party talks dealing with North Korean denuclearization, and each of the working groups addressing conflicts in the post-Soviet space, such as the OSCE Minsk group on Nagorno-Karabakh, and the 5+2 group on Transnistria. In such post-Soviet regions in particular, Russia has a unique capacity to contribute to peaceful resolution of territorial disputes by facilitating trade and economic engagement with and between former adversaries, and acting as a peacekeeper once a final settlement is reached. In the Middle East, Russia still controls a network of commercial and intelligence assets and has substantial influence with the Syrians, who should be pushed to play a more productive role in the Arab-Israeli peace process.

10. Russians buy U.S. goods.

As the U.S. economy stops and starts its way out of recession, most everyone agrees that boosting exports is a key component in the recovery. And Russia is a big market. U.S. companies such as Boeing, International Paper, and John Deere have invested billions in Russian subsidiaries and joint ventures. In all, there are more than 1,000 U.S. companies doing business there today. They are in Russia not only to take advantage of the country's vast natural resources and highly skilled workers but also to meet the demand for American-branded goods. The Russian middle class wants consumer goods and the country's firms increasingly seek advanced U.S. equipment and machinery. Between 2004 and 2008, before the financial crisis hit, U.S.-Russia trade grew by more than 100 percent to over $36 billion annually, and although that figure dropped by a third in 2009, there is potential for an even better, more balanced trade relationship in the coming decade.

In short, **Russia is indispensible**. As long as the United States participates in the global economy and has interests beyond its own borders, it will have no choice but to maintain relations with Russia. And good relations would be even better.

#### Romney causes massive foreign backlash and nuclear wars around the globe

Doug Bandow 5-15-2012; Doug Bandow is a senior fellow at the Cato Institute and former special assistant to President Ronald Reagan. “Mitt Romney: The Foreign Policy of Know-Nothingism” http://www.cato.org/publications/commentary/mitt-romney-foreign-policy-knownothingism

Romney’s overall theme is American exceptionalism and greatness, slogans that win public applause but offer no guidance for a bankrupt superpower that has squandered its international credibility. “This century must be an American century,” Romney proclaimed. “In an American century, America leads the free world and the free world leads the entire world.” He has chosen a mix of advisers, including the usual neocons and uber-hawks — Robert Kagan, Eliot Cohen, Jim Talent, Walid Phares, Kim Holmes, and Daniel Senor, for instance — that gives little reason for comfort. Their involvement suggests Romney’s general commitment to an imperial foreign policy and force structure. Romney is no fool, but he has never demonstrated much interest in international affairs. He brings to mind George W. Bush, who appeared to be largely ignorant of the nations he was invading. Romney may be temperamentally less likely to combine recklessness with hubris, but he would have just as strong an incentive to use foreign aggression to win conservative acquiescence to domestic compromise. This tactic worked well for Bush, whose spendthrift policies received surprisingly little criticism on the right from activists busy defending his war-happy foreign policy. The former Massachusetts governor has criticized President Obama for “a naked political calculation or simply sheer ineptitude” in following George W. Bush’s withdrawal timetable in Iraq and for not overriding the decision of a government whose independence Washington claims to respect. But why would any American policymaker want to keep troops in a nation that is becoming ever more authoritarian, corrupt, and sectarian? It is precisely the sort of place U.S. forces should not be tied down. In contrast, Romney has effectively taken no position on Afghanistan. At times he appears to support the Obama timetable for reducing troop levels, but he has also proclaimed that “Withdrawal of U.S. forces from Afghanistan under a Romney administration will be based on conditions on the ground as assessed by our military commanders.” Indeed, he insisted: “To defeat the insurgency in Afghanistan, the United States will need the cooperation of both the Afghan and Pakistani governments — we will only persuade Afghanistan and Pakistan to be resolute if they are convinced that the United States will itself be resolute,” and added, “We should not negotiate with the Taliban. We should defeat the Taliban.” Yet it’s the job of the president, not the military, to decide the basic policy question: why is the U.S. spending blood and treasure trying to create a Western-style nation state in Central Asia a decade after 9/11? And how long is he prepared to stay — forever? On my two trips to Afghanistan I found little support among Afghans for their own government, which is characterized by gross incompetence and corruption. Even if the Western allies succeed in creating a large local security force, will it fight for the thieves in Kabul? Pakistan is already resolute — in opposing U.S. policy on the ground. Afghans forthrightly view Islamabad as an enemy. Unfortunately, continuing the war probably is the most effective way to destabilize nuclear-armed Pakistan. What will Romney do if the U.S. military tells him that American combat forces must remain in Afghanistan for another decade or two in order to “win”? The ongoing AfPak conflict is not enough; Romney appears to desire war with Iran as well. No one wants a nuclear Iran, but Persian nuclear ambitiions began under America’s ally the Shah, and there is no reason to believe that the U.S. (and Israel) cannot deter Tehran. True, Richard Grenell, who briefly served as Romney’s foreign-policy spokesman, once made the astonishing claim that the Iranians “will surely use” nuclear weapons. Alas, he never shared his apparently secret intelligence about the leadership in Tehran’s suicidal tendencies. The Iranian government’s behavior has been rational even if brutal, and officials busy maneuvering for power and wealth do not seem eager to enter the great beyond. Washington uneasily but effectively deterred Joseph Stalin and Mao Zedong, the two most prolific mass murderers in history. Iran is no substitute for them. Romney has engaged in almost infantile ridicule of the Obama administration’s attempt to engage Tehran. Yet the U.S. had diplomatic relations with Hitler’s Germany and Stalin’s Russia. Washington came to regret not having similar contact with Mao’s China. Even the Bush administration eventually decided that ignoring Kim Jong-Il’s North Korea only encouraged it to build more nuclear weapons faster. Regarding Iran, Romney asserted, “a military option to deal with their nuclear program remains on the table.” Building up U.S. military forces “will send an unequivocal signal to Iran that the United States, acting in concert with allies, will never permit Iran to obtain nuclear weapons... Only when the ayatollahs no longer have doubts about America’s resolve will they abandon their nuclear ambitions.” Indeed, “if all else fails... then of course you take military action,” even though, American and Iranian military analysts warn, such strikes might only delay development of nuclear weapons. “Elect me as the next president,” he declared, and Iran “will not have a nuclear weapon.” Actually, if Tehran becomes convinced that an attack and attempted regime change are likely, it will have no choice but to develop nuclear weapons. How else to defend itself? The misguided war in Libya, which Romney supported, sent a clear signal to both North Korea and Iran never to trust the West. Iran’s fears likely are exacerbated by Romney’s promise to subcontract Middle East policy to Israel. The ties between the U.S. and Israel are many, but their interests often diverge. The current Israeli government wants Washington to attack Iran irrespective of the cost to America. Moreover, successive Israeli governments have decided to effectively colonize the West Bank, turning injustice into state policy and making a separate Palestinian state practically impossible. Perceived American support for this creates enormous hostility toward the U.S. across the Arab and Muslim worlds. Yet Romney promises that his first foreign trip would be to Israel “to show the world that we care about that country and that region” — as if anyone anywhere, least of all Israel’s neighbors, doesn’t realize that. He asserted that “you don’t allow an inch of space to exist between you and your friends and allies,” notably Israel. The U.S. should “let the entire world know that we will stay with them and that we will support them and defend them.” Indeed, Romney has known Israeli Prime Minister Benjamin Netanyahu for nearly four decades and has said that he would request Netanyahu’s approval for U.S. policies: “I’d get on the phone to my friend Bibi Netanyahu and say, ‘Would it help if I say this? What would you like me to do?’” Americans would be better served by a president committed to making policy in the interests of the U.S. instead. Romney’s myopic vision is just as evident when he looks elsewhere. For instance, he offered the singular judgment that Russia is “our number one geopolitical foe.” Romney complained that “across the board, it has been a thorn in our side on questions vital to America’s national security.” The Cold War ended more than two decades ago. Apparently Romney is locked in a time warp. Moscow manifestly does not threaten vital U.S. interests. Romney claimed that Vladimir “Putin dreams of ‘rebuilding the Russian empire’.” Even if Putin has such dreams, they don’t animate Russian foreign policy. No longer an ideologically aggressive power active around the world, Moscow has retreated to the status of a pre-1914 great power, concerned about border security and international respect. Russia has no interest in conflict with America and is not even much involved in most regions where the U.S. is active: Asia, the Middle East, and Latin America. Moscow has been helpful in Afghanistan, refused to provide advanced air defense weapons to Iran, supported some sanctions against Tehran, used its limited influence in North Korea to encourage nuclear disarmament, and opposes jihadist terrorism. This is curious behavior for America’s “number one geopolitical foe.” Romney’s website explains that he will “implement a strategy that will seek to discourage aggressive or expansionist behavior on the part of Russia,” but other than Georgia where is it so acting? And even if Georgia fell into a Russian trap, Tbilisi started the shooting in 2008. In any event, absent an American security guarantee, which would be madness, the U.S. cannot stop Moscow from acting to protect what it sees as vital interests in a region of historic influence. Where else is Russia threatening America? Moscow does oppose NATO expansion, which actually is foolish from a U.S. standpoint as well, adding strategic liabilities rather than military strengths. Russia strongly opposes missile defense bases in Central and Eastern Europe, but why should Washington subsidize the security of others? Moscow opposes an attack on Iran, and so should Americans. Russia backs the Assad regime in Syria, but the U.S. government once declared the same government to be “reformist.” Violent misadventures in Kosovo, Afghanistan, Iraq, and Libya demonstrate that America has little to gain and much to lose from another attempt at social engineering through war. If anything, the Putin government has done Washington a favor keeping the U.S. out of Syria. This doesn’t mean America should not confront Moscow when important differences arise. But treating Russia as an adversary risks encouraging it to act like one. Doing so especially will make Moscow more suspicious of America’s relationships with former members of the Warsaw Pact and republics of the Soviet Union. Naturally, Romney wants to “encourage democratic political and economic reform” in Russia — a fine idea in theory, but meddling in another country’s politics rarely works in practice. Just look at the Arab Spring. Not content with attempting to start a mini-Cold War, Mitt Romney dropped his nominal free-market stance to demonize Chinese currency practices. He complained about currency manipulation and forced technology transfers: “China seeks advantage through systematic exploitation of other economies.” On day one as president he promises to designate “China as the currency manipulator it is.” Moreover, he added, he would “take a holistic approach to addressing all of China’s abuses. That includes unilateral actions such as increased enforcement of U.S. trade laws, punitive measures targeting products and industries that rely on misappropriations of our intellectual property, reciprocity in government procurement, and countervailing duties against currency manipulation. It also includes multilateral actions to block technology transfers into China and to create a trading bloc open only for nations genuinely committed to free trade.” Romney’s apparent belief that Washington is “genuinely committed to free trade” is charming nonsense. The U.S. has practiced a weak dollar policy to increase exports. Washington long has subsidized American exports: the Export-Import Bank is known as “Boeing’s Bank” and U.S. agricultural export subsidies helped torpedo the Doha round of trade liberalization through the World Trade Organization. Of course, Beijing still does much to offend Washington. However, the U.S. must accommodate the rising power across the Pacific. Trying to keep China out of a new Asia-Pacific trade pact isn’t likely to work. America’s Asian allies want us to protect them — no surprise! — but are not interested in offending their nearby neighbor with a long memory. The best hope for moderating Chinese behavior is to tie it into a web of international institutions that provide substantial economic, political, and security benefits. Beijing already has good reason to be paranoid of the superpower which patrols bordering waters, engages in a policy that looks like containment, and talks of the possibility of war. Trying to isolate China economically would be taken as a direct challenge. Romney would prove Henry Kissinger’s dictum that even paranoids have enemies. Naturally, Romney also wants to “maintain appropriate military capabilities to discourage any aggressive or coercive behavior by China against its neighbors.” However, 67 years after the end of World War II, it is time for Beijing’s neighbors to arm themselves and cooperate with each other. Japan long had the second largest economy on earth. India is another rising power with reason to constrain China. South Korea has become a major power. Australia has initiated a significant military build-up. Many Southeast Asian nations are constructing submarines to help deter Chinese adventurism. Even Russia has much to fear from China, given the paucity of population in its vast eastern territory. But America’s foreign-defense dole discourages independence and self-help. The U.S. should step back as an off-shore balancer, encouraging its friends to do more and work together. It is not America’s job to risk Los Angeles for Tokyo, Seoul, or Taipei. Romney similarly insists on keeping the U.S. on the front lines against North Korea, even though all of its neighbors have far more at stake in a peaceful peninsula and are able to contain that impoverished wreck of a country. The Romney campaign proclaims: “Mitt Romney will commit to eliminating North Korea’s nuclear weapons and its nuclear-weapons infrastructure.” Alas, everything he proposes has been tried before, from tougher sanctions to tighter interdiction and pressure on China to isolate the North. What does he plan on doing when Pyongyang continues to develop nuclear weapons as it has done for the last 20 years? The American military should come home from Korea. Romney complained that the North’s nuclear capability “poses a direct threat to U.S. forces on the Korean Peninsula and elsewhere in East Asia.” Then withdraw them. Manpower-rich South Korea doesn’t need U.S. conventional support, and ground units do nothing to contain North Korea’s nuclear ambitions. Pull out American troops and eliminate North Korea’s primary threat to the U.S. Then support continuing non-proliferation efforts led by those nations with the most to fear from the North. That strategy, more than lobbying by Washington, is likely to bring China around. Romney confuses dreams with reality when criticizing President Obama over the administration’s response to the Arab Spring. “We’re facing an Arab Spring which is out of control in some respects,” he said, “because the president was not as strong as he needed to be in encouraging our friends to move toward representative forms of government.” Romney asked: “How can we try and improve the odds so what happens in Libya and what happens in Egypt and what happens in other places where the Arab Spring is in full bloom so that the developments are toward democracy, modernity and more representative forms of government? This we simply don’t know.” True, the president doesn’t know. But neither does Mitt Romney. The latter suffers from the delusion that bright Washington policymakers can remake the world. Invade another country, turn it into a Western-style democracy allied with America, and everyone will live happily every after. But George W. Bush, a member of Mitt Romney’s own party, failed miserably trying to do that in both Afghanistan and Iraq. The Arab Spring did not happen because of Washington policy but in spite of Washington policy. And Arabs demanding political freedom — which, unfortunately, is not the same as a liberal society — have not the slightest interest in what Barack Obama or Mitt Romney thinks. Yet the latter wants “convene a summit that brings together world leaders, donor organizations, and young leaders of groups that espouse” all the wonderful things that Americans do. Alas, does he really believe that such a gathering will stop, say, jihadist radicals from slaughtering Coptic Christians? Iraq’s large Christian community was destroyed even as the U.S. military occupied that country. His summit isn’t likely to be any more effective. Not everything in the world is about Washington. Which is why Romney’s demand to do something in Syria is so foolish. Until recently he wanted to work with the UN, call on the Syrian military to be nice, impose more sanctions, and “increase the possibility that the ruling minority Alawites will be able to reconcile with the majority Sunni population in a post-Assad Syria.” Snapping his fingers would be no less effective. Most recently he advocated arming the rebels. But he should be more cautious before advocating American intervention in another conflict in another land. Such efforts rarely have desirable results. Iraq was a catastrophe. Afghanistan looks to be a disaster once American troops come home. After more than a decade Bosnia and Kosovo are failures, still under allied supervision. Libya is looking bad. Even without U.S. “help,” a full-blown civil war already threatens in Syria. We only look through the glass darkly, observed the Apostle Paul. It might be best for Washington not to intervene in another Muslim land with so many others aflame. Despite his support for restoring America’s economic health, Romney wants to increase dramatically Washington’s already outsize military spending. Rather than make a case on what the U.S. needs, he has taken the typical liberal approach of setting an arbitrary number: 4 percent of GDP. It’s a dumb idea, since America already accounts for roughly half the globe’s military spending — far more if you include Washington’s wealthy allies — and spends more in real terms than at any time during the Cold War, Korean War, or Vietnam War, and real outlays have nearly doubled since 2000. By any normal measure, the U.S. possesses far more military resources than it needs to confront genuine threats. What Romney clearly wants is a military to fight multiple wars and garrison endless occupations, irrespective of cost. My Cato colleague Chris Preble figured that Romney's 4 percent gimmick would result in taxpayers spending more than twice as much on the Pentagon as in 2000 (111 percent higher, to be precise) and 45 percent more than in 1985, the height of the Reagan buildup. Over the next ten years, Romney's annual spending (in constant dollars) for the Pentagon would average 64 percent higher than annual post-Cold War budgets (1990-2012), and 42 percent more than the average during the Reagan era (1981-1989). If Mitt Romney really believes that the world today is so much more dangerous than during the Cold War, he should spell out the threat. He calls Islamic fundamentalism, the Arab Spring, the impact of failed states, the anti-American regimes of Cuba, Iran, North Korea, and Venezuela, rising China, and resurgent Russia “powerful forces.” It’s actually a pitiful list — Islamic terrorists have been weakened and don’t pose an existential threat, the Arab Spring threatens instability with little impact on America, it is easier to strike terrorists in failed states than in nominal allies like Pakistan and Saudi Arabia, one nuclear-armed submarine could vaporize all four hostile states, and Russia’s modest “resurgence” may threaten Georgia but not Europe or America. Only China deserves to be called “powerful,” but it remains a developing country surrounded by potential enemies with a military far behind that of the U.S. In fact, the greatest danger to America is the blowback that results from **promiscuous intervention** in conflicts not our own. Romney imagines a massive bootstrap operation: he wants a big military to engage in social engineering abroad which would require an even larger military to handle the violence and chaos that would result from his failed attempts at social engineering. Better not to start this vicious cycle. America faces international challenges but nevertheless enjoys unparalleled dominance. U.S. power is buttressed by the fact that Washington is allied with every industrialized nation except China and Russia. America shares significant interests with India, the second major emerging power; is seen as a counterweight by a gaggle of Asian states worried about Chinese expansion; remains the dominant player in Latin America; and is closely linked to most of the Middle East’s most important countries, such as Israel, Saudi Arabia, Egypt, Jordan, and Iraq. If Mitt Romney really believes that America is at greater risk today than during the Cold War, he **is not qualified to be president**. In this world the U.S. need not confront every threat, subsidize every ally, rebuild every failed state, and resolve every problem. Being a superpower means having many interests but few vital ones warranting war. Being a bankrupt superpower means exhibiting judgment and exercising discretion. President Barack Obama has been a disappointment, amounting in foreign policy to George W. Bush-lite. But Mitt Romney sounds even worse. His rhetoric suggests a return to the worst of the Bush administration. The 2012 election likely will be decided on economics, but foreign policy will prove to be equally important in the long-term. America can ill afford another know-nothing president.

### 1nc oil

#### Oil prices are stable

Irina Rogovaya August 2012; writer for Oil and Gas Eurasia, Oil Price Changes: Everyone Wants Stability <http://www.oilandgaseurasia.com/articles/p/164/article/1875/>

According to the current base forecast for the Eurozone prepared by Oxford Economics, within the next two years oil prices will continue to drift lower, but not beyond the bounds of the “green” corridor for the world economy – $80-100 per barrel. This forecast coincides with the expectations of the World Bank (see Fig. 4). Meanwhile, S&P analysts presented three scenarios for the energy market in June. In the base scenario, oil will remain at $100 per barrel. S&P calculates that the likelihood of a stressful scenario in which the price of oil drops below $60 per barrel (the bottom in 2009) is 1:3. Analysts believe that given today’s state of economic and geopolitical affairs, strong political will would be needed to force the price of oil below $70-80 (the current level of effective production). So far, that will is nowhere to be seen. Recent events have shown that nobody is interested in the Eurozone breaking apart. And nobody wants a war in the Persian Gulf. Furthermore, nobody today intends to force the production of less valuable oil. At least that is what OPEC leaders promised during the recent summit. “Stability on the market should be at the center of our attention,” General Secretary Abdalla El-Badri said. Even Saudi Arabia, which consistently violates OPEC discipline in over-producing its quotas, announced at the beginning of July that it would review its margins to determine a higher price for Saudi supplies ordered on August contracts. Analysts noted that the average price of oil supplied to Europe and Asia had jumped (by $0.85 and $0.66 per barrel respectively), a fact which could be seen as proof that the collective members of the cartel will not let prices fall under $100 per barrel.

#### The plan tanks them

**Hickman 12** [“Fusion Power: Is It Getting Any Closer?”, 23 August 2011, Leo, The Guardian]

Cowley says a Manhattan Project for fusion would, of course, greatly speed up its delivery. "ITER will cost around €15bn, but that is not expensive when you consider the prize. At present, all we can hope for is, if oil prices are still high in 2015 and we pull off a big shot demonstrating parity of power, this gets us the international attention – and therefore the funding – we need to really push on. JET was first funded and built during the 1970s due to the oil crisis. That is not a coincidence: there has always been a direct correlation between investment in fusion and the price of oil. Interestingly, though, China is now putting a lot of money into fusion."

#### The impact is Canada

Ora Morison 7-15-2012; The Globe and Mail “Falling oil puts pinch on economy” <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/falling-oil-puts-pinch-on-economy/article4418057/>

Few countries feel the rise and fall of oil prices more than Canada, and a healthy oil industry is **crucial to ensure** the country’s modest growth outlook doesn’t turn into something worse. Consider that oil and gas exports and investment in machinery and infrastructure in the oil sands accounted for fully one-third of Canada’s economic growth in 2010 and 2011. In May, oil exports fell 5.5 per cent to $5.7-billion (Canadian), according to Statistics Canada – the fourth-consecutive monthly decline. “If oil prices get to a point where they are going to deter investment in the [energy] sector, the negatives outweigh the benefits,” said Diana Petramala, an economist at the Toronto-Dominion Bank. At Calgary-based Mullen Group, the negatives are starting to be felt. The trucking and oil-field services company is paying less for fuel, its second-largest operating cost. But its most important customers, oil sands producers, are slowing production and putting off expansion. Murray Mullen, CEO of the company whose roots go back to 1949, says he’s happier when energy prices are higher, even if it costs more to run his machines. “There’s a fine balance,” he said. “Oil is a lifeblood to our customers.” Worries are mounting about the energy sector’s pace of spending. Energy stocks, which comprise one-quarter of the value of the S&P/TSX composite index, have been poor performers. The sector has declined by 9 per cent this year as declining oil prices, particularly for Canadian benchmark crude, have dampened earnings expectations. If oil prices were to reach as low as $70 per barrel, large Canadian producers such as Imperial Oil, controlled by Exxon Mobil Corp., would be “significantly outspending cash flow,” said Andrew Potter, an analyst at CIBC World Markets.

#### Causes Quebec secession

Nuechterlein1999; Rockefeller Research Scholar at the University of California, Berkeley,[Donald E. Nuechterlein, September 1999. “CANADA DEBATES A VARIETY OF DOMESTIC ISSUES,” <http://donaldnuechterlein.com/1999/canada.html>.

Current opinion polls in Quebec show that pro-independence forces are somewhat below the 50 percent margin that would trigger formal negotiations with the rest of Canada on the terms of separation. The current premier, Lucien Bouchard, is a crafty nationalist who will not put the question to another referendum unless he is convinced it will obtain a majority vote. My guess is that if Bouchard has doubts about reaching at least 50 percent in favor of independence, he will first call a provincial election and hope to increase the majority of his Parti Quebecois. That would give him more confidence about winning a referendum. An important factor influencing many Quebeckers will be their degree of satisfaction with the Canadian economy. At present, prosperity reigns in most parts of the country and many Quebec voters may worry that their province will suffer economically if it separates.

#### Quebec secession crushes Canada’s great power aspirations – those are key t0 prevent Arctic conflict, Russia-EU war, NATO collapse, and check multipolar transition wars

Zach Paikin 7-27-2012; a frequent media commentator on public policy issues and Canadian political affairs. He also contributes research on international affairs to several Washington-based think tanks and institutes. He was a candidate for National Policy Chair of the Liberal Party of Canada at the party’s 2012 biennial convention. He holds a BA in Middle East Studies from McGill University and is currently pursuing graduate studies in Global Affairs at the University of Toronto. ‘How Canada can become a major global power ‘ http://www.ipolitics.ca/2012/07/27/zach-paikin-how-canada-can-become-a-major-global-power/

The theme of my most recent column may suggest that Quebec could not survive outside of Canada under the current economic circumstances. What also needs to be understood, however, is that Canada cannot survive without Quebec. This is not only the case with regards to the economic assets that the Canadian economy would lose from Quebec’s secession (forestry, shale gas, mining, hydroelectricity and a bilingual workforce all come to mind quite quickly). Canada, as we know it, would cease to exist. In a Canada without Quebec, Ontario would possess almost half of the seats in the national legislature. Some might suggest that the province of Ontario would need to be broken up in order to prevent its dominance when it comes to political issues within the federation. The result may well be a total redraw of the federal-provincial power balance and therefore a fundamental change in how Canada operates and thinks of itself – and that’s only if negotiations between Ottawa and the other provinces succeed. The question of whether Canada and Quebec need one another has proven to be a never-ending debate. Some outside Quebec acknowledge the latter’s above-cited contribution to Confederation whereas others pounce on the idea that Quebec is holding back the more successful provinces in the West. Within Quebec, some note that the French-speaking province could not survive economically without Canada while others disagree in one way or another, arguing that the economic downturn following secession would be negligible in the long run or alternatively that secession is a goal to be achieved over the long term. The key for those who cherish national unity is to advance an irrefutable argument that focuses on what all regions of Canada can accomplish together. Here is one very important element of that thesis: A strong and united Canada can be one of the 21st century’s major powers. This is a position seldom put forward by our country’s political leaders and one that may come as a shock to most readers. Canadians have for a very long time seen themselves in the shadow of the United States – as members of a nation content to make a large moral impact but a limited physical one. Becoming a global power is not only within the realm of possibility thanks to Canada’s large territory, good borders (an ally to the south and oceans to the north, east and west), potential for population growth, relatively solid finances and abundant natural resources. It is also a national necessity. The United States, already in strategic decline, will likely voluntarily continue its slow retreat from the world in order to get its fiscal house in order and to placate an electorate that is largely fed up with allocating so much spending to overseas wars. That means that Washington will be less inclined to defend its NATO allies in future conflicts. And Canada is most certainly vulnerable. As climate change advances and the Northwest Passage continues to thaw, global interest in the Arctic region (believed to possess as much as 25 per cent of the world’s oil reserves) increases. Canada has a vital interest in ensuring that the Passage – which has considerable strategic and economic value – is viewed internationally as being under Canadian sovereignty. This presents Canada with the opportunity not only to rebuild and refocus its military, but also to make significant strategic advances across the globe. A deal – be it legal or economic – struck between Canada and Russia over the Northwest Passage would be of major importance to both countries and would allow for an important rapprochement between Ottawa and Moscow. This would allow Canada to increase its diplomatic clout in former Soviet republics and Warsaw Pact states, which in turn would give Canada the opportunity to act more significantly as an interlocutor between NATO and Russia when it comes to issues such as ballistic missile defense. (Missile defense installations are planned over the coming years in Eastern European states such as Poland and Romania.) In the same vein, Canada would have more of a say in mediating economic relations between the European Union (which now contains numerous Eastern European states) and Russia, which consequently would increase Canada’s influence within the EU itself. A Canada with major inroads in Europe and Russia. A Canada with the potential to increase exports to Asian markets drastically. A Canada that can use its special relationship with the United States to project its influence to regions originally thought to be out of its reach. This is the Canada of the 21st century. And this Canada can only be achieved if national unity is preserved and strengthened. If Quebec were to separate Canada would lose more than just military bases vital to ensuring Arctic sovereignty. (A similar argument could be advanced if the West, for argument’s sake, were to separate.) Canada would also have to deal with Quebec’s competing Arctic claims and may lose the ability to achieve much of the global influence described above as a consequence. A strong and united Canada is one that can think strategically and advance its interests significantly across the globe. Advancing those interests is what will give Canada the ability to advance and secure its values at home and abroad on a magnified scale. This is the next argument in support of national unity, and the one that will be explored in my next column.

### 1nc counterplan (1)

#### Text: The United States federal government shouldn’t test nuclear weapons.

#### The United States Federal Government should pass the Startup Act 2.0

**Counterplan solves economy and leadership**

**Hoover 5/25** - Washington Bureau Chief <Kent. “Bipartisan Startup Act 2.0 aims to aid entrepreneurs” Business Courier. May 25, 2012. http://www.bizjournals.com/cincinnati/print-edition/2012/05/25/bipartisan-startup-act-20-aims-to-aid.html>//CS

It’s a relaunch, so Startup Act 2.0 is a good name for legislation introduced by a bipartisan group of senators who want to boost entrepreneurship in the U.S. Like the original Startup Act, the new version is a grab bag of ideas: • Foreigners who receive postgraduate degrees from U.S. universities in science, technology, engineering and math would be given green cards so they could stay in this country. So would foreigners who start new businesses in the U.S. • Investments in startups would be permanently exempted from capital gains taxes, as long as the stock is held for at least five years. • A targeted research and development tax credit would be offered to companies less than five years old and with less than $5 million in annual revenue. • Commercialization of university R&D would be accelerated. • Government agencies would be required to conduct a cost-benefit analysis of proposed rules that have an economic impact of $100 million or more, and assess whether these rules hurt the formation of new businesses. One of the original Startup Act’s goals – making it easier for young companies to get capital -–was addressed by Congress in the Jumpstart Our Business Startups Act. The JOBS Act got rare bipartisan support in Congress and was signed into law by President Barack Obama on April 5. Supporters of Startup Act 2.0 contend more needs to be done, however, to foster the growth of new companies. “Startup 2.0 is the logical next step,” said Sen. Mark Warner, D-Va. “Our bipartisan economic growth plan sets out to prove the critics wrong: Congress can get something done during an election year by coming together to strengthen the economy and create jobs,” said Sen. Jerry Moran, R-Kan.

### 1ac counterplan (1)

#### The United States Federal Government should ban the production of tritium for all uses except fusion reactors and should not incent or permit the building of fusion reactors.

#### The counterplan severs the link between nuclear war and extinction and lowers risk of miscalc by eliminating the option of a devastating first strike

**Kalinowski and Colschen ’95**, Martin, Diplom-Physiker. Interdisciplinary Research Group in Science. Technology and

Society. (IAN US) Institut fOr Kernphysik and Lars, Diplom-Politologe, Interdisciplinary Research Group in Science, Technology and Society, (IANUS) Institut fOr Kernphysik “International Control of Tritium to Prevent Horizontal

Proliferation and to Foster Nuclear Disarmament” Science & Global Security. 1995. Volume 5. pp.131-203

www.princeton.edu/sgs/publications/sgs/pdf/5\_2kalinowski.pdf

**The reduction of the yield of nuclear weapons by eliminating tritium could be used for a novel approach to nuclear disarmament. The precondition for such a qualitative nuclear disarmament is a decision to abandon high yield nuclear weapons and to reduce the overall yield of the arsenal significantly. Such an approach of nuclear disarmament was presented in 1991 by Trutnev et ap3 Instead of reducing the number of delivery systems or nuclear warheads, Trutnev et al. suggest limiting the explosive yield of each nuclear weapon** to three to five kilotons TNT. Theoretically, **the total explosive power of the superpowers' nuclear arsenals -about 6 gigatons total yield -could be reduced by a factor of 100. They argue that such nuclear arsenals would still be adequate to sustain the system of deterrence, but they would no longer pose a threat to civilization.** Furthermore, **the balance of power would be more stable because the potential first-strike effectiveness of strategic offensive forces would be substantially reduced. Trutnev et al. believe their proposal would be a decisive step towards a world free of nuclear weapons. The next step would be the numerical limitation of nuclear warheads, while preserving bilateral stability.** Eventually the military concepts and political doctrines that rely on nuclear deterrence must be abolished to clear the way for the elimination of nuclear weapons. T**he present strategic U.S. nuclear arsenal has a total maximum yield of some 2.9 gigatons (see table A.l).II If used in a strategic war, the total yield of the United States and Russia is more than 5 gigatons and could lead to a nuclear winter**, although the science of nuclear winter remains highly uncertain. All models of a strategic nuclear war which would lead to a nuclear winter scenario assume total explosive yields in the range of 5 to 10 gigatons, which would kill 750 million to 1.1 billion people in the northern hemisphere immediately and probably another two billion later.12 **Even after START II, the nuclear arsenal remaining in the United States would probably still have an upper bound of total yield on the order of 1.4 gigatons (see table A.l). This reduced yield probably does not preclude the possibility of a nuclear winter.**

#### Bannning tritium production solves yield reduction -- it functionally locks in status quo trends

**Panofsky ‘3** Wolfgang, professor and director emeritus at the Stanford Linear Accelerator Center, Menlo Park, California, “Atoms for (war and) peace” in the American Scientist, January-February http://www.americanscientist.org/bookshelf/pub/atoms-for-war-and-peace

**The nuclear stockpile of the United States consists entirely of thermonuclear weapons that contain two distinct stages: a fission explosion (the so-called primary) driving a larger combined fission and fusion explosion (the so-called secondary). The primary is "boosted"—that is, a small container of tritium (a heavy radioactive isotope of hydrogen), generally mixed with other gases, is placed inside the plutonium pit of the weapon.** Although nuclear reactions induced in this tritium when the bomb is set off produce only a negligible amount of fusion energy, the neutrons they release greatly enhance the fission yield of the primary. **Because tritium has a half-life of approximately 12 years, and because there is need for a significant "performance margin" for the primary to have sufficient yield to ignite the secondary, the tritium must be replenished at frequent intervals.** **Until recently, tritium and plutonium for nuclear weapons were produced in government-owned nuclear reactors dedicated to that military purpose. These aging facilities have been shut down, both because of growing concerns about their safety and because today the United States has a great excess of plutonium for weapons. But a decision had to be made regarding how to resupply the tritium. The following options existed: (1) Do nothing, on the assumption that the radioactive decay of tritium, by rendering weapons unusable, will diminish the stockpile at a pace equal to or slower than that required by arms control agreements.** (2) Buy tritium from other countries—in particular, Canada or Russia. (3) Construct a reactor of either an old or new type, or finish building one that is incomplete, and dedicate it solely to producing tritium for nuclear weapons. (4) Construct an accelerator to produce neutrons, which in turn can be used to breed tritium from targets containing materials such as helium-3 or lithium-6. (5) Pay for "irradiation services" from an existing commercial nuclear reactor by introducing lithium-bearing rods into it, from which tritium can then be extracted.

### 1nc counterplan

#### Text: The United States Federal Government should pass the Startup Act 2.0

#### Counterplan solves stem

**Hoover 5/25** - Washington Bureau Chief <Kent. “Bipartisan Startup Act 2.0 aims to aid entrepreneurs” Business Courier. May 25, 2012. http://www.bizjournals.com/cincinnati/print-edition/2012/05/25/bipartisan-startup-act-20-aims-to-aid.html>//CS

It’s a relaunch, so Startup Act 2.0 is a good name for legislation introduced by a bipartisan group of senators who want to boost entrepreneurship in the U.S. Like the original Startup Act, the new version is a grab bag of ideas: • Foreigners who receive postgraduate degrees from U.S. universities in science, technology, engineering and math would be given green cards so they could stay in this country. So would foreigners who start new businesses in the U.S. • Investments in startups would be permanently exempted from capital gains taxes, as long as the stock is held for at least five years. • A targeted research and development tax credit would be offered to companies less than five years old and with less than $5 million in annual revenue. • Commercialization of university R&D would be accelerated. • Government agencies would be required to conduct a cost-benefit analysis of proposed rules that have an economic impact of $100 million or more, and assess whether these rules hurt the formation of new businesses. One of the original Startup Act’s goals – making it easier for young companies to get capital -–was addressed by Congress in the Jumpstart Our Business Startups Act. The JOBS Act got rare bipartisan support in Congress and was signed into law by President Barack Obama on April 5. Supporters of Startup Act 2.0 contend more needs to be done, however, to foster the growth of new companies. “Startup 2.0 is the logical next step,” said Sen. Mark Warner, D-Va. “Our bipartisan economic growth plan sets out to prove the critics wrong: Congress can get something done during an election year by coming together to strengthen the economy and create jobs,” said Sen. Jerry Moran, R-Kan.

### 1nc solvency

#### Your aff is a giant lie and only a product of the propaganda machine -- fusion is infeasible and fusion research is worthless and based on a radical misunderstanding of science

**McCabe '12** Tom S. blogger at The Rational Futurist, "The Real Story Behind Fusion Energy" January 11

http://rationalfuturist.com/2012/01/11/the-real-story-behind-fusion-energy/

It is time for us, as a society, to finally acknowledge something we should have realized decades ago: nuclear fusion is a scam. The countless tens of billions of dollars that have been dumped into it have mostly been wasted. It’s not going to help to keep throwing money at the problem; we need to admit our collective mistake and stop throwing good money after bad. How did things get this way? The biggest problem is that nuclear fusion is now an industry, just like the coal or oil or gas industry, except that it doesn’t actually produce anything. As any scientist will tell you, there’s little money in research, and most scientists are in it because they enjoy it, not to get rich. Nuclear fusion has, however, become an exception to this. Every year, billions of dollars are spent building more, and larger, nuclear fusion test reactors. The people in charge of these mammoth building projects, naturally, don’t want their funding to be cut off. And so, in order to ensure continued public support for fusion research, they have used a good chunk of the billions of dollars thrown at them to saturate their airwaves with propaganda, much of which is blatant lies. According to the nuclear fusion propaganda machine, when we are finally able to build fusion power plants, it will solve all of our energy problems forever. We’ll have unlimited free energy. We won’t have any pollution from power plants. There won’t be any risk of explosions or catastrophes. We’ll have solved global warming. We won’t have to deal with the radioactivity of conventional (fission-based) nuclear power plants, and there’ll be no more radioactive waste. It would, indeed, be wonderful if all these things came true. However, unfortunately, it is all lies and misinformation. In order to understand how all of these claims are either highly exaggerated or outright false, let’s take a look at how a future fusion power plant would work. Of course, to start off with, you need fuel. What kind of fuel would a fusion power plant run on? Two kinds, actually- deuterium, a heavy isotope of hydrogen, and lithium, a very reactive light metal used in rechargeable batteries. During the fusion process, the lithium atom is hit with a neutron, causing it to break up into tritium (a radioactive isotope of hydrogen) and helium. The tritium atom then collides with the deuterium atom at very high speed, creating more helium, and another neutron to start the process all over again. According to fusion propaganda, the fusion reactors of the future will be “powered by water”. It is true that one of the fusion fuels, deuterium, can be found in seawater. However, this is extremely misleading, because seawater only contains a tiny amount of deuterium- 0.0032% by mass. And this 0.0032% is extremely hard to separate, because it’s chemically almost identical to regular hydrogen. Saying that a fusion power plant is “powered by water” is like saying that aluminum foil is “made out of rock”; there is, in fact, more than a thousand times more aluminum in rock than there is deuterium in water, and the aluminum is actually easier to extract. And this also ignores the other component of fusion fuel, lithium, which has to be mined out of a big hole in the ground like any other metal; lithium is also just as hard to get as deuterium. For instance, the Handbook of Lithium and Natural Calcium says, “Lithium is a comparatively rare element. Although it is found in many rocks and some brines, it is always in very low concentrations.” With this knowledge, we can also expose the lie that fusion is the “power source of the stars”. It is, in fact, also true that stars run on nuclear fusion. However, the type of fusion that stars run on- the proton-proton chain reaction- is so inefficient that trying to use it on Earth would be utterly hopeless. Stars are actually very inefficient as power sources- luckily for us, because if they were more efficient, they would have burned through all their fuel ages ago. If we wanted to actually power our homes using “the power source of the Sun”, we would need six hundred and fifty metric tons of hydrogen, a power source which would weigh the same as fourteen Boeing 727 jumbo jets, just to run a single microwave. The reality is, the fact that the stars run on fusion has nothing whatsoever to do with whether fusion is a viable power source for our civilization.

#### Earliest possible implementation date is 2100 -- optimistic ITER researchers

**Reville '12** William, an emeritus professor of biochemistry and public awareness of science officer at UCC. "Fusion energy still a pipe dream" The Irish Times, June 7 http://www.irishtimes.com/newspaper/sciencetoday/2012/0607/1224317432816.html

Iter will test the feasibility of a sustained fusion reaction and will then become a test nuclear fusion power plant. Following several delays it is hoped to build Iter by 2020, after which about 1,000 scientists and engineers will work on the device for 20 years. If Iter works, a demonstration reactor with all the functions of a power plant will be built by 2050 and tested for 10 to 20 years. Finally, it may be possible to start up full-scale nuclear fusion worldwide by 2100, but many things could lengthen this timeline. Fusion technology emits no warming CO2 gas but nuclear fusion will not be available to mitigate the effects of global warming this century.

#### Fusion is always two years away

**NEI Notes '12** "Fusion-Fission Fandango in Texas", by Mark Flanagan, ed.

http://neinuclearnotes.blogspot.com/2012/09/fusion-fission-fandango-in-texas.html

Which keeps it firmly in the university/lab sphere, for now. In describing fusion projects, I sometimes think of them as “Today’s Technology Tomorrow,” because fusion always seems two years away from a major breakthrough. It always has, as long as I’ve followed the subject.

### 1ac stem

**Airpower supremacy resilient**

**Carpenter and Deptula 2008** - \*Air Force Major, instructor at the Industrial College of the Armed Forces, \*\*Lt. General, deputy chief of staff for Intelligence, Surveillance, and Recon for the Air Force (2/21, Mace and David, "Aerospace Nations", Washington Times, http://www.washingtontimes.com/news/2008/feb/21/aerospace-nations/print/, WEA)

We are an aerospace nation in many ways. Our commercial air arm towers over any other nation. Our Navy's ability to project airpower from the sea is unmatched by any other navy. Our Marines' ability to provide close support to surface forces is "par excellence." Our Army's helicopter force — more than 6,000 strong — is the largest in the world. Our Air Force leads the world in aerospace capability in all aspects of the third dimension. Charged with leading military operations in air, space, and cyberspace, the Air Force provides the global vigilance, global reach and global power that underpin us as the world's sole superpower.

**Deterrence collapse inevitable—even Gates concedes.**

**Morgan, 8** [David, 10/28, “U.S. must update nuclear arsenal as rivals are: Gates”, http://www.reuters.com/article/topNews/idUSTRE49R7ST20081028]

WASHINGTON (Reuters) - U.S. Defense Secretary Robert Gates warned on Tuesday that America's aging nuclear weapons stockpile faces a bleak future of decline just as rival nations including Russia and China are modernizing their nuclear arsenals.

Nearly two decades after the end of the Cold War, Gates said the U.S. nuclear program is suffering from an exodus of qualified designers and technicians, the stockpile has not been modernized and no weapons have been tested since 1992.

"Let me first say very clearly that our weapons are safe, secure and reliable. The problem is the long-term prognosis -- which I would characterize as bleak," Gates said in a speech to the Carnegie Endowment for International Peace, a Washington think tank.

Gates used the warning to urge Congress to fund a modernization effort by the Pentagon and the Energy Department to create new weapons designs that he said could be used to create a safer and more secure stockpile without abandoning the 16-year-old unilateral U.S. ban on new weapons tests.

Russia has begun to rely increasingly on its nuclear force by developing new land- and sea-based missiles while maintaining the ability to manufacture new warheads, Gates told his audience.

He said China has also expanded the number of missiles and pursued new land, sea and air systems that can deliver nuclear warheads.

"Currently, the United States is the only declared nuclear power that is neither modernizing its nuclear arsenal nor has the capability to produce a new nuclear warhead," Gates said.

"To be blunt, **there is absolutely no way we can maintain a credible deterrent** and reduce the number of weapons in our stockpile without resorting to testing our stockpile or pursuing a modernization program."

Since the end of the Cold War, the United States has taken a series of weapons systems including the Peacekeeper ballistic missile out of service and plans to reduce the U.S. nuclear warhead stockpile by two-thirds to between 1,700 and 2,200 by 2010 under an agreement with Moscow.

### 1ac fusion

#### Trade disputes don’t escalate – solidified international norms

**Ikenson, 12** [March 5th, Daniel, [Daniel Ikenson](http://www.cato.org/people/daniel-ikenson) is director of the Herbert A. Stiefel Center for Trade Policy Studies at the Cato Institute,

<http://www.cato.org/publications/free-trade-bulletin/trade-policy-priority-one-averting-uschina-trade-war>]

An **emerging narrative** in 2012 is that a proliferation of protectionist, treaty-violating, or otherwise illiberal Chinese policies is to blame for worsening U.S.-China relations. China trade experts from across the ideological and political spectra have lent credibility to that story. Business groups that once counseled against U.S. government actions that might be perceived by the Chinese as provocative have changed their tunes. **The term "**trade war**" is no longer taboo**.¶ The media have portrayed the United States as a victim of underhanded Chinese practices, including currency manipulation, dumping, subsidization, intellectual property theft, forced technology transfer, discriminatory "indigenous innovation" policies, export restrictions, industrial espionage, and other ad hoc impediments to U.S. investment and exports. ¶ Indeed, it is beyond doubt that certain Chinese policies have been provocative, discriminatory, protectionist, and, in some cases, violative of the agreed rules of international trade. But there is more to the story than that. U.S. policies, politics, and attitudes have contributed to rising tensions, as have rabble-rousing politicians and a confrontation-thirsty media. If the public's passions are going to be inflamed with talk of a trade war, prudence demands that the war's nature be properly characterized and its causes identified and accurately depicted.¶ Those agitating for tough policy actions should put down their battle bugles and consider that trade wars are never won. Instead, such wars claim victims indiscriminately and leave significant damage in their wake. Even if one concludes that China's list of offenses is collectively more egregious than that of the United States, the most sensible course of action — for the American public (if not campaigning politicians) — is one that avoids mutually destructive actions and finds measures to reduce frictions with China.¶ Nature of the U.S.-China Trade War¶ It should not be surprising that the increasing number of commercial exchanges between entities in the world's largest and second largest economies produce frictions on occasion. But the U.S.-China economic relationship **has** not descended **into an** existential call to arms**.** Rather, both governments have taken protectionist actions that are legally defensible or plausibly justifiable within the rules of global trade. That is not to say that those measures have been advisable or that they would withstand closer legal scrutiny, but to make the distinction that, unlike the free-for-all that erupted in the 1930s, these trade "skirmishes" have been prosecuted in a manner that speaks to a mutual recognition of the primacy of — if not respect for — the rules-based system of trade. And that suggests that the kerfuffle is containable and the recent trend reversible.1

#### Trade does not solve war—there’s no correlation between trade and peace

**MARTIN, MAYER, AND THOENIG 2008 (**Phillipe, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, and Centre for Economic Policy Research; Thierry MAYER, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, CEPII, and Centre for Economic Policy Research, Mathias THOENIG, University of Geneva and Paris School of Economics, The Review of Economic Studies 75)

Does globalization pacify international relations? The “liberal” view in political science argues that increasing trade flows and the spread of free markets and democracy should limit the incentive to use military force in interstate relations. This vision, which can partly be traced back to Kant’s Essay on Perpetual Peace (1795), has been very influential: The main objective of the European trade integration process was to prevent the killing and destruction of the two World Wars from ever happening again.1 Figure 1 suggests2 however, that during the 1870–2001 period, the correlation between trade openness and military conflicts is not a clear cut one. The first era of globalization, at the end of the 19th century, was a period of rising trade openness and multiple military conflicts, culminating with World War I. Then, the interwar period was characterized by a simultaneous collapse of world trade and conflicts. After World War II, world trade increased rapidly, while the number of conflicts decreased (although the risk of a global conflict was obviously high). There is no clear evidence that the 1990s, during which trade flows increased dramatically, was a period of lower prevalence of military conflicts, even taking into account the increase in the number of sovereign states.

**No china war**

**Perry and Scowcroft 9** William (Michael and Barbara Berberian professor at Stanford University.) and Brent (resident trustee of the Forum for International Policy.) “US Nuclear Weapons Policy.” 2009. Council on Foreign Relations. Online.

Economic interdependence provides an incentive to avoid military conflict and nuclear confrontation. Although the United States has expressed concern about the growing trade deficit with China, the economies of the two countries have become increasingly intertwined and interdependent. U.S. consumers have bought massive quantities of cheap Chinese goods, and Beijing has lent huge amounts of money to the United States. Similarly, Taiwan and the mainland are increasingly bound in a reciprocal economic relationship. These economic relation- ships should reduce the probability of a confrontation between China and Taiwan, and keep the United States and China from approach- ing the nuclear brink, were such a confrontation to occur. On other nuclear issues, China and the United States have generally supported each other, as they did in the six-party talks to dismantle North Korea’s nuclear weapons programs. Here, the supportive Beijing-Washington relationship points toward potentially promising dialogues on larger strategic issues.

#### China won’t retaliate—no impact

Bosco 9/6—national security consultant, master of laws from Georgetown (Joseph A., 9/6/12, <http://www.washingtonpost.com/opinions/china-and-a-mitt-romney-presidency/2012/09/06/32917432-f76f-11e1-a93b-7185e3f88849_story.html>, RBatra)

First, it takes two to wage a “trade war.” When China realizes that Mr. Romney is serious about declaring it a currency manipulator (which it is), wiser counsel may well prevail in Beijing. Playing by international rules is far more in China’s interest than is retaliating against free and fair trade. China could avoid the choice between dangerous escalation and embarrassing submission by preemptively starting to free its currency before a Romney inauguration.

**No impact to forests**

**Lomborg 01** (Bjørn, director of the Copenhagen Consensus Center, Danish author, academic, “The Skeptical Environmentalist: Measuring the Real State of the World,” Cambridge University Press, originally published in Danish in 1998)

There are two primary reasons for viewing the tropical forests as a vital resource. In the 1970s we were told that rainforests were the lungs of the Earth. Even in July 2000, WWF argued for saving the Brazilian Amazon since “the Amazon region has been called the lungs of the world.” But this is a myth. True enough, plants produce oxygen by means of photosynthesis, but when they die and decompose, precisely the same amount of oxygen is consumed. Therefore, forests in equilibrium (where trees grow but old trees fall over, keeping the total biomass approximately constant) neither produce nor consume oxygen in net terms. Even if all plants, on land as well as at sea, were killed off and then decomposed, the process would consume less than 1 percent of the atmosphere’s oxygen.

The other argument in favor of preserving the forests is to conserve the globe’s profusion of species, or the biodiversity. We will look into this argument in chapter 23. In short it can be said that over the next 50 years we will not lose 50 percent of all species as claimed by many, but more like 0.7 percent. One cannot generally argue that these species constitute an actual economic resource (along the lines that they may constitute new and potentially vital medicines) but we may well hold moral reasons for their preservation. At the same time, numerous false impressions exist regarding the condition of our forests. Most people believe that over the last 50 years we have wiped out large swathes of rainforest, and perhaps temperate forest as well. Statements such as the one from the WWF quoted above naturally help to cement this idea. But as we have pointed out, there has not been a fall in global forest area during this period. On the other hand, Europe got rid of a large proportion of its forest by the end of the Middle Ages in order to make room for farming and bigger populations.

**Ozone depletion inevitable**

**TIMES EDUCATIONAL SUPPLEMENT 1-16-2004**

Without this protection, there would be little life on Earth. So, ozone is formed by UV, destroyed by UV, and in the process it protects us from UV. What this means is that there is an "ozone balance" -a state in which ozone is being created and destroyed at equal rates -which keeps the ozone layer in being. The balance is naturally fragile and fluctuating, and anything that upsets it and increases the rate of ozone destruction is potentially life-threatening -hence the worry, since the 1980s, about the effect of the release into the atmosphere of chlorofluorocarbons (CFCs), such as those used in aerosols, refrigerators and air conditioners. These interfere with the ozone balance by promoting complex chemical reactions that speed up the breakdown of ozone. The problem is aggravated by the fact that CFCs were used for many years in the belief that they were inert, with no environmental penalties. Their very stability, however, means that even after they have been phased out, they will remain in the atmosphere for a long time.

**Water quality is better than ever**

**Mehan 7** (Tracay, Former Assistant @ EPA, CQ Congressional Testimony, “Open Space, Biodiversity, Air and Water Quality Issues”, 2-27, L/N)

By just about any measure, America has improved its water quality over the past three decades: pounds of pollution abated, stream segments improved, fisheries restored. Today, twice as many Americans are served by advanced or secondary wastewater treatment. We are actually closing in on no-net-loss of wetlands. Lake Erie, once declared dead, is a Walleye fisherman's Mecca. Bill Ruckelshaus, the former EPA Administrator, is reported to have said that even if all our waters are not fishable or swimmable, at least there not flammable!

## 2nc

### overview

**Pakistan**

**Morgan, 10 –** former member of the British Labour Party Executive Committee. A political writer, his first book was "The Mind of a Terrorist Fundamentalist" He is a journalist and columnist for http://www.thecheers.org/ magazine (Stephen, “Better Another Taliban Afghanistan, than a Taliban NUCLEAR,” 6/4, http://society.ezinemark.com/better-another-taliban-afghanistan-than-a-taliban-nuclear-pakistan-4d0ce18ba75.html)

Strong centrifugal forces have always bedevilled the stability and unity of Pakistan, and, in the context of the new world situation, the country could be faced with civil wars and popular fundamentalist uprisings, probably including a military-fundamentalist coup d'état.

Fundamentalism is deeply rooted in Pakistan society. The fact that in the year following 9/11, the most popular name given to male children born that year was "Osama" (not a Pakistani name) is a small indication of the mood. Given the weakening base of the traditional, secular opposition parties, conditions would be ripe for a coup d'état by the fundamentalist wing of the Army and ISI, leaning on the radicalised masses to take power. Some form of radical, military Islamic regime, where legal powers would shift to Islamic courts and forms of shira law would be likely. Although, even then, this might not take place outside of a protracted crisis of upheaval and civil war conditions, mixing fundamentalist movements with nationalist uprisings and sectarian violence between the Sunni and minority Shia populations.

The nightmare that is now Iraq would take on gothic proportions across the continent. The prophesy of an arc of civil war over Lebanon, Palestine and Iraq would spread to south Asia, stretching from Pakistan to Palestine, through Afghanistan into Iraq and up to the Mediterranean coast.

Undoubtedly, this would also spill over into India both with regards to the Muslim community and Kashmir. Border clashes, terrorist attacks, sectarian pogroms and insurgency would break out. A new war, and possibly nuclear war, between Pakistan and India could not be ruled out.

Atomic Al Qaeda

Should Pakistan break down completely, a Taliban-style government with strong Al Qaeda influence is a real possibility. Such deep chaos would, of course, open a "Pandora's box" for the region and the world. With the possibility of unstable clerical and military fundamentalist elements being in control of the Pakistan nuclear arsenal, not only their use against India, but Israel becomes a possibility, as well as the acquisition of nuclear and other deadly weapons secrets by Al Qaeda.

Invading Pakistan would not be an option for America. Therefore a nuclear war would now again become a real strategic possibility. This would bring a shift in the tectonic plates of global relations. It could usher in a new Cold War with China and Russia pitted against the US.

#### China trade

Mike Shedlock, 7-31-2012; registered investment advisor representative for SitkaPacific Capital Management, “Is global trade about to collapse? Where are oil prices headed? A chat with Mish Shedlock by James Stafford” http://energybulletin.net/stories/2012-07-31/global-trade-about-collapse-where-are-oil-prices-headed-chat-mish-shedlock

Oilprice.com: In regards to presidential elections, how do you think energy will fare under Obama and under Romney? Which sectors will benefit, and which will suffer? Mish: Mitt Romney has declared that if he’s elected he is going to label China a currency manipulator and increase tariffs on China across the board. That's something that I believe he might be able to do by mandate. If he's elected and he does follow through, I think the result will be a global trade war the likes of which we have not seen since the infamous Smoot-Hawley Tariff Act compounded problems during the Great Depression. Simply put, I think that global trade will collapse if Romney wins and he follows through on his campaign promises.

#### Turns warming and causes extinction

**China Daily, 8** (Rikki N. Massand and Gazelle Emami, “U.S.-China relations at the world's fingertips,” 4-20-2008, http://www.chinadaily.com.cn/world/2008-04/20/content\_6629700.htm, JMP)

That theme resonated from coast to coast. At the University of California-Berkeley, speaker Sidney Rittenberg took a more intimate approach to U.S.-China relations. A man who lived in China for 35 years, Rittenberg has worked for the past two decades as an advisor to major corporations doing business in China such as AIG, Intel, Hughes Aircraft, Pricewaterhouse Coopers, and Ford. At the Bay Area gathering he emphasized respect and dignity through his own stories, and instead of categorizing the issues into right and wrong Rittenberg advocates looking at the bigger picture. For him the imperative for Americans is to learn to get along with the Chinese.

“We must -- we don't have a choice. **The crises that threaten the human race**, like weapons of mass destruction in the hands of terrorist groups, global warming, **none of the issues will get resolved unless we work with China**, Brazil, India and of course Europe and other countries. Really the central axis that holds the whole thing together is the U.S. and China," Rittenberg said.

### jobs thumper

#### Romney has abandoned the economy as a campaign strategy

**Shear, 10/1**/12 (Michael, New York Times, “Romney Broadens Focus as Economic Argument Sputters” http://www.nytimes.com/2012/10/02/us/politics/as-economic-argument-sputters-romney-broadens-focus.html?\_r=0)

There is little evidence that the strategy is working, at least not to the degree that Mr. Romney had hoped. Polls show voters growing somewhat more optimistic, and increasingly willing to trust the president as much as they do Mr. Romney on jobs and the economy.

With the race now in the home stretch and the debates starting on Wednesday, Mr. Romney’s campaign appears to be shifting course, abandoning its hope of making the election a simple referendum on Mr. Obama’s jobs record.

Instead, Mr. Romney intends to hit the White House with a series of arguments — on energy, health care, taxes, spending and a more direct attack on Mr. Obama’s foreign policy record.

#### The jobs report will be slightly over 100,000 jobs

**Madigan, 9/28**/12 (Kathleen, Next Week’s Tape: Get Ready for Another Middling Jobs Report, Wall Street Journal, http://blogs.wsj.com/marketbeat/2012/09/28/next-weeks-tape-get-ready-for-another-middling-jobs-report/)

The fourth quarter kicks off next week with one big report.

Another first Friday of the month means another employment report. Since this is the penultimate report before the elections, it will be picked over even more so than usual for what it says about the economy, and about potential election results.

Job growth has slowed sharply since the spring, and economists don’t expect an acceleration in September. The median forecast of economists surveyed by Dow Jones Newswires calls for an increase of 115,000 in nonfarm payrolls, up only a bit from August’s 96,000 addition.

The unemployment rate is expected to stay at 8.1%. If so, September would be the 44th month of a reading above 8%, an unprecedented string of high joblessness in the modern era.

#### That means it won’t affect the election or will slightly benefit Obama

**Cillizza, 10/1**/12 (Chris, “Welcome to the most important week of the campaign” Washington Post, http://www.washingtonpost.com/blogs/the-fix/wp/2012/10/01/welcome-to-the-most-important-week-of-the-campaign/)

Scenario #3: Debate draw, mediocre (100,000 jobs created) jobs report

Combine a debate that decides nothing with a jobs report that tells us nothing (really) about the direction of the economy, and this week will amount to a push — setting the stage for the second and third debates later this month to potentially make more of a difference. One thought on a mediocre jobs report: The growing optimism we mentioned above doesn’t seem to be based on any particular economic indicator, since all of the indicators seem to be pointing in different directions. That suggests that no new news is good news for Obama on the economic front. If the jobs report produces headlines that point to a lack of clarity in the jobs picture, that sort of status quo-ness could well allow the incumbent to keep the perception of momentum — or at least lurching progress — he has been able to build over the past few weeks.

### fusion

#### The public hates fusion -- they won’t perceive it as distinct from nuclear power.

Svoboda, ‘11

[Elizabeth, Popular Mechanics, 7-1, “IS FUSION FINALLY FOR REAL,” <http://www.popularmechanics.co.za/features/is-fusion-finally-for-real/>]

Given the recent partial meltdown of reactors in Japan, finding public support for any form of nuclear energy might seem unlikely. Still, fusion has some important safety advantages over nuclear fission: to produce energy from fission, atoms such as uranium- 235 are split into radioactive elements, some of which have extremely long half-lives. Nuclear fusion produces helium and neutrons, and no super-long-lived radioactive waste. Plus, fusion cannot cause runaway reactions because it requires a steady input of energy for the isotopes to fuse; any plant malfunction would cause near-immediate shutdown. Over the long term, fusion power might reduce pressure on fossil fuels such as oil and coal, while complementing clean but intermittent energy sources such as wind and solar.

#### Strong opposition is bipartisan – the plan starts more fights than it can finish

**ABC News, 11** (April20, “Nuclear Power: Po Nuclear Power: Opposition Spikes After Japan Earthquake,” http://abcnews.go.com/Politics/nuclear-power-opposition-grows-japan-earthquake-abc-news/story?id=13412262#.UAnUlWHZATY, d/a 7-20-12

Americans by a 2-1 margin oppose building more nuclear power plants in the United States, an 11-point spike in opposition from a few years ago. In the aftermath of Japan's nuclear plant crisis, 64 percent in this ABC News/Washington Post poll oppose new nuclear plant construction, while 33 percent support it. "**Strong" opposition now far outstrips strong support**, 47-20 percent. Opposition is up from 53 percent in a 2008 poll, and strong opposition is up even more, **by 24 points**. The results reflect the significant [challenges facing the nuclear power industry](http://abcnews.go.com/Politics/us-nuclear-power-plants-safe/story?id=13256973), which had been reaching for greater acceptance on the basis of factors including high oil prices, environmental concerns prompted by the Gulf oil spill a year ago and efforts to curb greenhouse gas emissions. Opposition is not merely a not-in-my-back-yard phenomenon. Thesurvey, conducted for ABC News by Langer Research Associates, finds that 67 percent of Americans oppose construction of a nuclear plant within 50 miles of their home -- not significantly different than **the number who oppose it regardless of location**.

Resistance is bipartisan, with majorities of Democrats, Republicans and independents alike opposed to new nuclear plant construction. Still, there are differences among groups; opposition is higher among Democrats (75 percent, vs. 59 percent of Republicans and independents combined), women (73 percent, vs. 53 percent of men) and liberals (74 percent, vs. 60 percent of moderates and conservatives). Support for building more nuclear plants has fluctuated in the past, showing sensitivity to nuclear crises. Starting at 61 percent in the mid-1970s, support fell sharply after the Three Mile Island accident in 1979 and bottomed out at just 19 percent in May 1986 after the Chernobyl crisis (which began 25 years ago next week).

**Women hate nuke power**

**Newport 12** – editor in chief of Gallup (Frank, “Americans Still Favor Nuclear Power a Year After Fukushima” Gallup, 3/26, http://www.gallup.com/poll/153452/Americans-Favor-Nuclear-Power-Year-Fukushima.aspx)

Although Republicans continue to be more supportive than Democrats of the use of nuclear energy, these political differences are **dwarfed** by the **30-point gender gap** in views on nuclear energy. Men are more likely than women to be Republicans, but politics alone do not explain the gap in support for nuclear energy between men and women. Something about nuclear energy apparently strikes a strongly negative chord in the minds of the nation's women, making them one of the few demographic segments of any type in which opposition to nuclear power is higher than 50%.

#### They’re key in swing states and could switch their vote

**Casserly 12** (Meghan, “Where women matter most in election 2012” Forbes, 6/7, <http://www.forbes.com/sites/meghancasserly/2012/06/07/election-2012-mitt-romney-obama-women-battleground-states/>)

But why is the female vote so attractive to presidential candidates? According to Dianne Bystrom, the director of the Carrie Chapman Catt Center for Women and Politics at Iowa State University, the reason the gender gap is so important isn’t the popularity points, but the fact that more women are registered to vote than men in most states, and a much higher female turnout rate at the polls. “It’s sheer numbers,” she says. In the 2008 election, 60.4% of the female population over the age of 18 showed up at the polls. Men? Just under 56%. In plainer terms, 10 million more women than men voted. Quite simply: more female voters=more female power, particularly in battleground states. Swing states, or the undecided “battleground” states that don’t historically vote with a specific party, are traditionally where candidates spend the most time eating pancakes, shaking hands and kissing babies and old people, particularly towards the end of campaign season. At this point, notes Susan Carroll, a senior scholar at the Center for American Women and Politics at Rutgers University, we begin to hear a lot of talk about “soccer moms.” Why’s that? As elections draw near, the few remaining undecided voters become priority. According to Carroll, “It’s traditionally the case that these voters are women.” Presidential candidates, then, must be ready to snap them up—at town hall meetings and barbecue joints where they attempt to speak with female voters on the issues they weigh the most important. “The set of issues tend to be the same but the priorities men and women give them are different,” says Carroll, who says that men weigh the economic debt at a top priority where women tend to hold healthcare and education in high regard. “**Women voters are incredibly important at the end of an election cycle**,” she says, “They’re the voters who are up for grabs and candidates are prepared to win them over on the issues that matter most.” And so, in battleground states where women out-vote men in the hundreds of thousands, the female voice becomes even more powerful than that of her sisters in solidly blue or red states. With that in mind, Obama and Romney would be smart to court Pennsylvanian women over New Yorkers, Floridians over Oklahomans. “Of course women are targeted,” says Bystrom. “When you look at the difference between the number of men and number of women, there are simply more women to woo.” For their ease (and yours, as it’s forever important for a women to known her own value—and that of her vote), we’ve crunched the Census data on the gender divide on voting in the most contentious states this fall.

### fission uniqueness

#### Obama is cutting nuclear incentives

**Bendery, 12** – Huffington Post (Jennifer, "Obama's Budget Nixes New Money For Program That Funded Solyndra," Huffington Post, 2/14, [www.huffingtonpost.com/2012/02/14/obama-budget-solyndra-program\_n\_1276605.html](http://www.huffingtonpost.com/2012/02/14/obama-budget-solyndra-program_n_1276605.html))

WASHINGTON -- In a quiet shift from the past two years, President Barack Obama's 2013 budget includes no new money for the Department of Energy loan guarantee program, the same program that House Republicans have scrutinized for losing more than $500 million in taxpayer dollars to the now-defunct solar power company, Solyndra.

Obama has regularly included huge increases to the program's loan guarantee authority in his budget, though Congress has not approved his proposals. **He provided** a $**36 billion** increase for nuclear reactors **in** his **2011** budget, and again in his 2012 budget. He also included $200 million in credit subsidies for renewable and energy efficiency projects in his 2012 budget. **This year, he provided nothing.**

Meg Reilly, a spokeswoman for the Office of Management and Budget, said in an email that Obama opted not to put new money toward the loan guarantee program this time because the administration is waiting on the results of an evaluation of the Energy Department's loan portfolio. Reilly also said the program still has "a significant amount of remaining resources" from prior years and that the focus will be on putting those funds to use. There's about $10 billion in its reserves.

The Energy Department "continues to conduct due diligence and is in active negotiations with a number of additional project sponsors," Reilly said. "It's important to point out here that, as of January 2012, over $24 billion in direct loans and loan guarantees have closed to support a diverse range of over 30 wind, solar, electric vehicles and other clean energy projects projected to fund more than 50,000 jobs."

But some environmental groups say Obama's budgetary shift is hugely significant because it means no new money for building nuclear power plants -- and they speculate that, at least in part, they have Solyndra to thank for the shift.

"The entire loan program has fallen into some disrepute on Capitol Hill ... because of Solyndra and some of the other renewable programs getting in trouble," said Michael Mariotte, executive director of Nuclear Information and Resource Service, an information hub for organizations concerned with nuclear power. The administration "may have decided to cut their losses" and stop providing new funds to the program altogether.

#### Nuclear power has been kept quiet because its politically toxic

Wood, 9-13-12  
(Elisa Aol Energy , "What Obama and Romney Don’t Say About Energy," http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy, accessed 9-14-12)

 But two other significant resources, nuclear power and

energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of [Japan's Fukushima](http://energy.aol.com/2012/03/09/fukushima-anniversary-the-road-ahead/) Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

Still, nuclear is unlikely to become a bigger slice of the energy pie in the US over the next two decades because of the high cost to build new plants, according the US Energy Information Administration. That may explain part of the campaign silence about nuclear. Another is lingering public worry about Fukushima, say industry observers. Even those who see nuclear as safe, say they understand why the candidates would want to steer clear of the discussion. Daniel Krueger, a managing director for [Accenture](http://energy.aol.com/tag/Accenture/)'s utilities generation and energy markets practice, described nuclear as **politically "toxic**," but added, "To me as an industry guy, in my view Fukushima proved the safety of nuclear energy. We had a major plant which was hit by an earthquake and tidal wave, and no one died as a direct result of radiation exposure. And the operator willingly sacrificed a plant worth tens of billions to protect the public. It was unimaginable what hit that plant."

### rels unsust

#### Romney win would crush US-Russian cooperation

Mark Adomanis, 4-17-2012; analyst for Forbes, Mitt Romney's Incoherent Russia Policy http://www.forbes.com/sites/markadomanis/2012/04/17/mitt-romneys-incoherent-russia-policy/

According to his campaign’s own words, Romney will basically ignore Central Asian authoritarianism, which literally everyone agrees is far nastier, more brutal, and more open than anything the Russians are guilty of, while simultaneously focusing on democracy promotion and regime change in Russia. That is to say Romney’s Russia policy will, to a large extent, be based on relentlessly confronting the Kremlin. But won’t the Kremlin react **extremely poorly** to an American policy that seeks not only to co-opt its longtime allies in Central Asia and but to depose the current regime? According to Romney, the answer is no: the Kremlin will be so impressed by the bravery and willpower of this American effort that it will more actively support American goals (though precisely why it would react positively to an open challenge to its authority is left unsaid). Despite the endless accusations of Obama’s “double standards” and his “moral relativism” Romney is quite openly embracing his own set of double-standards. As the campaign’s website itself says, one set of moral values will be applied to the Central Asians while a completely different, and much more exacting, set of values will be applied to the Russians. It goes almost without saying that this is the sort of bad-faith posturing that really drives the Russians batty and that they react very poorly to this sort of thing. While I personally am of a strongly realist orientation, and have little patience for the attempt to inject “values” into an international system that naturally tends to be amoral and anarchic, I understand that there is a coherent case to be made for the neoconservative position. Very intelligent people, including many of my friends and acquaintances, hold views similar to the ones Romney espouses towards, and while I can’t say I find them convincing I’m not nearly egotistical enough to think that my own views are the only “correct” ones. However Romney’s mix-and-match approach, a dollop of realism here, a large dose of neoconservatism there, a dash of accommodation here and a big helping of confrontation there, will not be a sober-minded attempt to appeal to everyone, but will instead be a disjointed mess that will simultaneously alienate and antagonize almost everyone in the region. While the foreign policy of any American president will never be perfectly within the bounds of a single school of thought, Romney’s entire Russia policy is a case study in avoiding hard choices. It quite openly attempts to be all things to all people: realists can look at it and see parts of their ideology, and neoconservatives can look at it and see parts of their ideology too. Romney will both openly confront the Russians and get more concessions from them, support democracy and work hand-in-hand with some of the world’s most repressive regimes, pursue missile defense and get Russian cooperation on Afghanistan, expand NATO and convince Russia to stop arming Syria, work to undermine Russia’s energy interests and get it to isolate Iran. There are no hard choices, no nasty compromises, and no trade-offs between values and interests: there is just the unapologetic exercise of American power and the positive consequences inevitably associated with it. Obama is himself very(!) far from being perfect, but at least his foreign policy seems to be a reasonably coherent attempt to advance America’s interests while avoiding, to the greatest extent possible, needless antagonism. As far as I can tell Romney’s main position is that Obama is bad, that everything he’s done is bad too, and that Romney would do better because… he said he will that’s why! There’s a deeper lesson in there about how this campaign is going to be waged, and a rather troubling one at that.

**This turns the aff and risks extinction**

**Allison and Blackwill, 10/30**/11 – \* director of the Belfer Center for Science and International Affairs at Harvard’s Kennedy School AND \*\* Henry A. Kissinger senior fellow for U.S. foreign policy at the Council on Foreign Relations (Graham and Robert, “10 reasons why Russia still matters,” Politico, http://www.politico.com/news/stories/1011/67178.html

That central point is that Russia matters a great deal to a U.S. government seeking to defend and advance its national interests. Prime Minister Vladimir Putin’s decision to return next year as president makes it all the more critical for Washington to manage its relationship with Russia through coherent, realistic policies. No one denies that Russia is a dangerous, difficult, often disappointing state to do business with. We should not overlook its many human rights and legal failures. Nonetheless, Russia is a player whose choices affect our vital interests in nuclear security and energy. It is key to supplying 100,000 U.S. troops fighting in Afghanistan and preventing Iran from acquiring nuclear weapons. Ten realities require U.S. policymakers to advance our nation’s interests by engaging and working with Moscow. First, Russia remains the only nation that can erase the United States from the map in 30 minutes. As every president since John F. Kennedy has recognized, Russia’s cooperation is critical to averting nuclear war. Second, Russia is our most consequential partner in preventing nuclear terrorism. Through a combination of more than $11 billion in U.S. aid, provided through the Nunn-Lugar Cooperative Threat Reduction program, and impressive Russian professionalism, two decades after the collapse of the “evil empire,” not one nuclear weapon has been found loose. Third, Russia plays an essential role in preventing the proliferation of nuclear weapons and missile-delivery systems. As Washington seeks to stop Iran’s drive toward nuclear weapons, Russian choices to sell or withhold sensitive technologies are the difference between failure and the possibility of success. Fourth, Russian support in sharing intelligence and cooperating in operations remains essential to the U.S. war to destroy Al Qaeda and combat other transnational terrorist groups. Fifth, Russia provides a vital supply line to 100,000 U.S. troops fighting in Afghanistan. As U.S. relations with Pakistan have deteriorated, the Russian lifeline has grown ever more important and now accounts for half all daily deliveries. Sixth, Russia is the world’s largest oil producer and second largest gas producer. Over the past decade, Russia has added more oil and gas exports to world energy markets than any other nation. Most major energy transport routes from Eurasia start in Russia or cross its nine time zones. As citizens of a country that imports two of every three of the 20 million barrels of oil that fuel U.S. cars daily, Americans feel Russia’s impact at our gas pumps. Seventh, Moscow is an important player in today’s international system. It is no accident that Russia is one of the five veto-wielding, permanent members of the U.N. Security Council, as well as a member of the G-8 and G-20. A Moscow more closely aligned with U.S. goals would be significant in the balance of power to shape an environment in which China can emerge as a global power without overturning the existing order. Eighth, Russia is the largest country on Earth by land area, abutting China on the East, Poland in the West and the United States across the Arctic. This territory provides transit corridors for supplies to global markets whose stability is vital to the U.S. economy. Ninth, Russia’s brainpower is reflected in the fact that it has won more Nobel Prizes for science than all of Asia, places first in most math competitions and dominates the world chess masters list. The only way U.S. astronauts can now travel to and from the International Space Station is to hitch a ride on Russian rockets. The co-founder of the most advanced digital company in the world, Google, is Russian-born Sergei Brin. Tenth, Russia’s potential as a spoiler is difficult to exaggerate. Consider what a Russian president intent on frustrating U.S. international objectives could do — from stopping the supply flow to Afghanistan to selling S-300 air defense missiles to Tehran to joining China in preventing U.N. Security Council resolutions. So next time you hear a policymaker dismissing Russia with rhetoric about “who cares?” ask them to identify nations that matter more to U.S. success, or failure, in advancing our national interests.

### stem

#### Base stable now—no crisis.

**Watts**, their author, **2K8** (Barry D, “The US Defense Industrial Base, Past, Present and Future,” CBA, http://www.csbaonline.org/4Publications/PubLibrary/R.20081015.\_The\_US\_Defense\_In/R.20081015.\_The\_US\_Defense\_In.pdf)

The US defense industrial base is not on the brink of imminent crisis or near collapse. The industry remains fairly innovative, relatively strong, and is capable of supplying American soldiers, sailors, marines, and airmen with world-class weapons and systems, even if they tend to reach the fielded forces later than expected and at increasingly higher costs than initially anticipated. Perhaps the most fundamental issue raised in this report, then, is the degree to which the American defense industry will, in the decades ahead, continue to be an enduring source of strategic advantage. For that to happen, the federal government will need to embrace a more consistent, thoughtful, longer-term, and active strategy for influencing the structure and capabilities of the American defense-industrial base. It remains to be seen whether future administrations will do so.

**Nuclear deterrence is inevitably not credible – 3 reasons**

**Gerson 09**—research analyst in the Strategic Initiatives Group, MA in International Relations from the University of Chicago (Michael, 29 September 2009, “RETHINKING U.S. NUCLEAR POSTURE,” <http://carnegieendowment.org/files/0929_transcript_nuclear_posture1.pdf>, RBatra)

On the one hand, I think you can make a case that U.S. threats, whether they’re implicit or explicit – and really what we’re talking about here is the ambiguous threat – **are simply not credible**. It’s not credible for a variety of reasons. I mean, one is the nuclear taboo, this moral and political aversion to using nuclear weapons that has emerged in the long absence of nuclear use and conflict. In the nuclear arena, the United States is largely seen as cool-headed, risk-averse and sensitive to casualties and collateral damage. The United States does not seem to be able to benefit from the sort of rationality of irrationality type argument. The prospect that the United States would unilaterally shatter the almost seven-decade record of non-use in conflict I think contributes to the belief that the United States would in fact not use nuclear weapons.

Another argument is I think that one could make the case that an unintended consequence of the United States first use – the United States efforts to lead to the global non-proliferation regime is that it reduces the credibility of the United States to use nuclear weapons first. If the United States spends all of this time working on the efforts to prevent others from getting nuclear weapons, it seems – it makes it less credible that the United States would risk shattering that and throwing it all away by using nuclear weapons first.

And finally, in the Gulf War, despite the threats of calculated ambiguity and the ambiguous threat of nuclear weapons, which some believe deterred Saddam, Bush, Scowcroft, Powell, and Baker, all said after the conflict that they had actually never intended on using nuclear weapons. And such public admission I think reduces the credibility of those threats.

**America’s credibility of use is in doubt – Obama and UN resolutions mean the guarantee is obsolete.**

**Shen 11** – (2/3/11, Dingli, PhD, professor of international relations at Fudan University, Executive Dean of Fudan University’s Institute of International Studies, and Director of Center for American Studies, “Extended nuclear deterrence: Fading fast,” Lowy Institute, http://lowyinterpreter.org/post/2011/02/03/Extended-deterrence-fading-fast.aspx DH)

Beyond the seeming decline of extended nuclear deterrence, the aforementioned trend is also indicative of America's caution in wielding the nuclear option. What is at stake is not deterrence or extended deterrence, but security assurance per se. The US has actually not loosened its security commitment to its allies, but in order to maintain the credibility of its deterrent, America is now less willing to coerce its non-nuclear rivals while it has increasingly more non-nuclear tools in its policy kit. This was manifested in the Obama Administration's Nuclear Posture Review last year.

Both North Korea and Iran have understood this, to their benefit. Iran understands that its violation of various UNSC resolutions would at most incur a non-nuclear US response. Indeed, UN Secretary General Ban Ki-moon is mediating a nuclear swap arrangement to lessen international concern, which could legitimise Iran's uranium enrichment. North Korea has also ventured into crises short of inviting US military strikes, and it has presented its own conventional deterrence plus a looming nuclear deterrent. Deterrence is no longer a US gadget.

Mutual nuclear deterrence among major powers is indeed less relevant nowadays, in a globalising age. At a co-dependent time, there are more incentives for inter-state compromise and reconciliation, while contingencies which require a nuclear showdown are implausible — hence the decline of nuclear deterrence among major powers, and extended nuclear deterrence backed by various non-nuclear options.

## 1nr

### 2nc solvency

#### Framing issue – their ev is propaganda

Grue, 6/10/12 (Nick, Green Conduct News, “Trading Fission for Fusion” http://www.greenconduct.com/news/2012/07/10/trading-fission-for-fusion/)

Fusion power may hold the answer to our future energy needs. When most people hear about fusion, it is usually in the context of the hydrogen-to-helium reaction that occurs in the sun. Like traditional nuclear fission reactions, fusion generates energy by manipulating atoms. As the names suggest, however, fission is the release of energy after splitting atoms, while fusion is the release of energy while fusing the two atoms together. Fission reactions release about a million times more energy than chemical reactions, and fusion has the [potential to release 3 to 4 times as much energy as fission.](http://www.diffen.com/difference/Nuclear_Fission_vs_Nuclear_Fusion) Fusion is commonly joked about as being the energy source of the future, [and always will be](http://2ndgreenrevolution.com/2009/04/02/nuclear-fusion-still-20-years-away/), and scientists working on the energy source have similarly remarked about just how difficult this energy source is to harness. One such scientist, Sébastien Balibar, stated, “We say that we will put the sun into a box. The idea is pretty. The problem is, [we don’t know how to make the box](http://www.ngpowereu.com/article/ITER-and-nuclear-fusion-Pro-or-con-fusion/).” Numerous labs within the United States and around the world are working on the fusion problem as the technology appears to have limited environmental repercussions, limited environmental risks, and no spent fuel, which are problems that current nuclear fission power plants experience. The potential energy generation from fusion is mind boggling as well. The average American citizen uses about [250 kilowatt-hours of energy per day](http://www.inference.phy.cam.ac.uk/withouthotair/c30/page_234.shtml). This includes driving their cars to and from work, heating or cooling their homes, working on their computers, and so on. Deuterium, the element necessary for nuclear fusion, is present in the quantity of 33 grams in every ton of water. The amount of energy released from just one gram of deuterium fusion reaction is 100,000 kilowatt-hours. This means that even if the world population were 30 billion people, instead of the current 7 billion, there would be enough deuterium to supply every single person with [30,000 kilowatt-hours per day for 1 million years](http://www.inference.phy.cam.ac.uk/withouthotair/c24/page_173.shtml). In a world where the average energy-guzzling American consumes 250 kilowatt-hours per day, the availability of 30,000 kilowatt-hours per day per person is unimaginable.

As the above scenario proves, the draw for fusion energy is certainly understandable. However, whether or not fusion energy is cost-effective, safe, or even possible is still up in the air. Luckily for all of us, many smart people are working on trying to crack the fusion problem. If [fusion energy does become available](http://www.huffingtonpost.com/martin-greenwald/fusion-energy_b_1557556.html), perhaps a new issue of too much available energy may become the problem of the future.

#### Increased funding doesn’t solve -- decades of research prove fusions still too far off.

Murphy, ‘12

[Tom, Professor of Physics -- UCSD, 1-31, “Nuclear Fusion,” <http://physics.ucsd.edu/do-the-math/2012/01/nuclear-fusion/>]

No one can truly say whether we will achieve fusion in a way that is commercially practical. If teams of PhDs have spent over 60 years wailing on the problem while spending tens of billions of dollars, I think it’s safe to use our fusion quest as the definition of hard. It’s a much larger challenge than sending men to the Moon. We have no historical precedent for an arduous technological problem on this scale that ultimately succeeded to become a ho-hum commercial reality. But for that matter, I don’t think we have any precedent for something on this scale that has failed. In short, we’re out of our depths and can’t be cocky about predictions in either direction.

#### The NIF hasn’t figured out a way to solve problems yet -- no fusion weapons soon.

Cleantech, ‘11

[Cleantech Magazine, Issue 3, “[Nuclear Fusion](http://www.cleantechinvestor.com/portal/nuclear/9573-nuclear-fusion.html),” <http://www.cleantechinvestor.com/portal/nuclear/9573-nuclear-fusion.html>]

However, nuclear fusion has to overcome huge technology barriers in terms of the energy required to initiate fusion (eg a plasma at a temperature around ten times greater than the core of the sun), and developing a means of containing the reaction.¶ While the energy input is great, the energy output is an order of magnitude greater. In terms of containment, magnetic containment has been at the core of major programmes like the Joint European Torus (JET) and its successor, ITER, scheduled for completion in Cadarache, France in 2018. Both rely on a tokamak (a doughnut-shaped steel chamber weighing 5,500 tonnes for ITER) with an immensely strong magnetic field providing the confinement that prevents the superheated plasma from coming into contact with the walls of the chamber and melting them. While JET produced a peak of 16MW for less than a second, ITER is expected to produce 500MW sustained for up to 1,000 seconds. A different approach, laser inertial confinement, is under way at the United States National Ignition Facility (NIF) and the European Union High Power Laser Research (HiPER) facility. Inertial confinement involves initiating the fusion reaction by heating a target containing deuterium and tritium (in a microcapsule, for example, or cryogenically cooled pellet) with an immensely powerful laser. The heated outer layer explodes, the reaction force compressing the remainder of the fuel pellet inwards with such great force that fusion occurs. The NIF system, brings its 192 beam petawatt laser system to bear on an air-gun pellet sized target is currently undergoing testing.

#### They still have tons of obstacles to overcome before fusion weapons are feasible.

Svoboda, ‘11

[Elizabeth, Popular Mechanics, 7-1, “IS FUSION FINALLY FOR REAL,” <http://www.popularmechanics.co.za/features/is-fusion-finally-for-real/>]

NIF scientists have taken a completely different approach. Instead of undertaking the delicate task of confining plasma inside a magnetic field, they aim to produce a controlled version of the fusion that takes place inside the Sun or a hydrogen bomb, using lasers as the reaction’s driver – a technique called inertial confinement fusion. NIF’s Moses notes that many of the building blocks of the project’s massive laser array have already been used successfully in other industrial settings: laser diodes similar to NIF’s have enabled fibre optic data transmission in the telecommunications industry for years. “It’s a good place to be when you’re riding the wave of other people’s work,” he says.¶ With its pulsed magnetic field design, the Helion team claims it has found the elusive sweet spot in the fusion landscape: a reliable, cheap reactor that doesn’t require finetuned optics or complicated plasma confinement. In Helion’s reactor, electric currents flowing inside the plasma reverse the direction of a magnetic field that’s applied from the outside; the new, closed field that results effectively confines the plasma.¶ “Compared with the tokamak and NIF, Helion’s reactor is relatively compact and low-cost,” says Richard Milroy, a physicist at the University of Washington who isn’t affiliated with Helion. “Utilities don’t need to invest billions for the first test reactor to see if things will work out.” Plus, he says, the plasma-formation area is separate from the burn chamber in Helion’s reactor, so its expensive components may last longer.¶ Still, all of these experimental fusion approaches face a host of scientific and practical unknowns. The massive numbers of neutrons generated during fusion may damage components of a tokamak over time, and the plasma inside can also become unstable, impeding the reaction. And even though NIF has managed to achieve partial fusion by firing individual rounds into its target chamber, similar lasers would probably need to fire 10 to 15 times every second in LIFE, the demonstration power plant Lawrence Livermore is designing for the early 2020s. That kind of consistent firing would require a laser driver with a high repetition rate, which has yet to be developed and tested.

#### More ev -- Coulomb barrier.

Murphy, ‘12

[Tom, Professor of Physics -- UCSD, 1-31, “Nuclear Fusion,” <http://physics.ucsd.edu/do-the-math/2012/01/nuclear-fusion/>]

A simple obstacle stands between us and fusion. It’s called the Coulomb barrier. Protons hate to get near each other, on account of their mutual positive charge and concomitant electrostatic repulsion. And they must get very close—about 10−15 m—before the strong nuclear force overpowers Coulomb’s vote. Even on a perfect collision course, two protons would have to have a closing velocity of 20 million meters per second (7% the speed of light) to get within 10−15 m of each other, corresponding to a temperature around 5 billion degrees! Even if the velocity is sufficient, the slightest misalignment will cause the repulsive duo to veer off course, not even flirting with contact. Quantum tunneling can take a bit of the edge off, requiring maybe a factor of two less energy/closeness, but all the same, it’s frickin’ hard to get protons together.

#### Fusion can’t solve before the energy crisis hits

**Rhodes 5** [Energy Balance, December 02, 2005, Christopher James Rhodes, President of the Royal Society of Chemistry ESR Group, and the award of a Higher Doctorate (D.Sc) by the University of Sussex, “Feasible Fusion Power? - I doubt it!”]

In June 2005, the EU, France, Japan, South Korea, China and the U.S. agreed to spend $12 billion to build an experimental fusion apparatus (called ITER) by 2014. It is planned that ITER will function as a research instrument for the following 20 years, and the knowledge gained will provide the basis for building a more advanced research machine. After another 30 years, if all goes well, the first commercial fusion powered electricity might come on-stream. The engineering requirements will be formidable, however, most likely confronting problems no one has thought of yet, and even according to the most favourable predictions of the experts, fusion power is still 60 years away, if it will arrive at all. Given that the energy crisis will hit hard long before then, I suggest we look to more immediate solutions, mainly in terms of energy efficiency, for which there is ample scope.

#### Fusion isn’t feasible – every new advancement is hollow

**Schulz, ‘9** senior fellow at the Manhattan Institute (Max Schulz, Summer 2009, "The Fusion Illusion," <http://www.thenewatlantis.com/publications/the-fusion-illusion)>//CC

The ensuing years would reprise this familiar storyline: Researchers would make a grand announcement heralding a new advance in fusion, potentially solving many of the world’s energy-related problems, only to have their claim wither under the harsh light of rigorous scientific scrutiny. Japanese researchers in the mid-1990s insisted they had achieved “break-even plasma conditions” and that their tokamak was producing five watts for every four that it consumed. Turns out it was not. About the same time, researchers manning JET, a large tokamak operated by a European consortium of researchers, gained attention for their bid to achieve break-even conditions. In reality, they were only producing six watts for every ten put into it. Writes Seife: “It was a record, and a remarkable achievement, but a net loss of 40 percent of energy is not the hallmark of a great power plant.”

#### Fusion doesn’t work – confinement

**Rhodes 5** [Energy Balance, December 02, 2005, Christopher James Rhodes, President of the Royal Society of Chemistry ESR Group, and the award of a Higher Doctorate (D.Sc) by the University of Sussex, “Feasible Fusion Power? - I doubt it!”]

The main difficulty which bedevils maintaining a working fusion reactor which might be used to fire a power station is containing the plasma, a process usually referred to as "confinement". Essentially, the plasma is confined in a magnetic bottle, since its component charged nuclei and electrons tend to follow the field of magnetic force, which can be so arranged that the lines of force occupy a proscribed region and are thus centralised to a particular volume. However, the plasma is a "complex" system that readily becomes unstable and leaks away. Unlike a star, the plasma is highly rarefied (a low pressure gas), so that the proton-proton cycle that powers the sun could not be thus achieved on earth, as it is only the intensely high density of nuclei in the sun's core that allows the process to occur sustainably, and that the plasma is contained within its own gravitational mass, and isolated within the cold vacuum of space.

### 2nc a2 counter interpretation

#### Ruled void for vagueness and struck down

**Klapach, 99** [Joseph S., JD Candidate – Cornell University Law School, “Thou Shalt Not Politic”, Cornell Law Review, January, 84 Cornell L. Rev. 504, Lexis]

A statute may be void for vagueness when (1) it is so indeterminate that ordinary individuals must guess at its meaning or application 68 or (2) it lacks sufficient definiteness for enforcement in a nonarbitrary manner. 69 In Thomas v. Collins, 70 for example, the Court struck down a statute restricting "solicitation" by labor unions, stating that "the supposedly clear-cut distinction between discussion, laudation, general advocacy, and solicitation puts the speaker ... wholly at the mercy of the varied understanding of his hearers ... Such a distinction offers no security for free discussion ... [and] blankets with uncer tainty whatever may be said." 71 In Big Mama Rag v. United States, 72 the leading case that addresses the question of vagueness and tax-exempt organizations, a feminist organization challenged as unconstitutionally vague certain Treasury regulations requiring 501(c)(3) educational organizations that "'advocate[] a particular position'" to present a "full and fair exposition" of the pertinent facts. 73 The court agreed with the challenge and struck down the regulations as unconstitutionally vague for failing to "explain[] which applicant organizations are subject to the standard and ... [to] articulate its substantive requirements." 74 The court first criticized the IRS for equating the terms "advocates a particular position" with "controversial," noting that this definition "gives IRS officials no objective standard by which to judge which applicant organizations are advo [\*517]  cacy groups ... [and leaves only] one's subjective notion [as the measure] of what is 'controversial.'" 75 The court then challenged the "full and fair exposition" standard with a barrage of questions:

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