## \*\*\*1AC\*\*\*

### 1AC SMR Markets adv

#### SMRS inevitable- Other suppliers will spread dangerous designs globally- Causes prolif- US tech solves and is modeled

Ferguson 2010 (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)

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.”¶

#### DOD adoption allows the US to shape international SMR standards

Loudermilk 2011 (Micah J. Loudermilk, Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, February 23, 2011, “In Defense of Small Reactors: A Response,” CSIS, http://csis.org/blog/defense-small-reactors-response)

What we do know, however, is this: the domestic nuclear industry in the U.S. has stagnated and virtually died since the Three Mile Island incident over 30 years ago. Meanwhile, foreign nuclear energy companies are surging ahead and making rapid strides in the energy industry – moving forward with advanced nuclear reactors while new countries constantly enter the market. Like it or not, the nuclear renaissance is here – the world is pressing on and the U.S. simply is not on board.¶ ¶ More than that, DOD investment as a “first mover” in the small reactor market in fact directly supports the nonproliferation agenda. As an increasingly large number of countries seek civilian nuclear power, real discussions on proliferation begin to center not on weapons, but on the weapons risk arising from the pursuit of energy.¶ ¶ Historically, this potential problem has been largely mitigated by the influence exerted by the U.S. in the global nuclear energy market. The U.S. is influential largely because of its historic lead in nuclear energy technology. However, with the atrophy of domestic capabilities, U.S. share of the global nuclear trade has declined precipitously as aspiring states turn elsewhere to meet their needs. Other countries, such as China, that are making rapid advances in the field, do not share the U.S. commitment to reactor safety and nonproliferation objectives. Indeed, as can be seen, DOD’s efforts as a “first mover” in the arena are imperative, not simply from a military security standpoint, but also from a mindset of preserving the nonproliferation agenda.¶ ¶ At the end of the day, small nuclear reactors offer a host of potential benefits in both areas where Andres and Breetz consider their use. On the domestic military installation side, they offer the ability to island domestic bases from the fragile civilian grid, ensure the availability of the nation’s military assets in the event of a cyber attack or blackout, and preserve the country’s ailing domestic nuclear energy industry. On the foreign side, the use of small reactors in forward operating areas can reduce the use of liquid fuel to power base generators, lessening the need for constant convoys and ultimately saving lives in the field. Even when taking into consideration the potential hurdles to small reactor adoption on these fronts, the benefits are ultimately tangible and real enough to make serious discussion and pursuit worthwhile.

**DOD “first mover” let’s us commercialize faster and out-compete other countries**

**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)

Path forward: Department of Defense as first-mover¶ Problematically, despite the immense energy security benefits that would accompany the wide-scale adoption of small modular reactors in the US, with a difficult regulatory environment, anti-nuclear lobbying groups, skeptical public opinion, and of course the recent Fukushima accident, the nuclear industry faces a tough road in the battle for new reactors. While President Obama and Energy Secretary Chu have demonstrated support for nuclear advancement on the SMR front, progress will prove difficult. However, a potential route exists by which small reactors may more easily become a reality: the US military.¶ The US Navy has successfully managed, without accident, over 500 small reactors on-board its ships and submarines throughout 50 years of nuclear operations. At the same time, serious concern exists, highlighted by the Defense Science Board Task Force in 2008, that US military bases are tied to, and almost entirely dependent upon, the fragile civilian electrical grid for 99% of its electricity consumption. To protect military bases’ power supplies and the nation’s military assets housed on these domestic installations, the Board recommended a strategy of “islanding” the energy supplies for military installations, thus ensuring their security and availability in a crisis or conflict that disrupts the nation’s grid or energy supplies.¶ DOD has sought to achieve this through decreased energy consumption and renewable technologies placed on bases, but these endeavors will not go nearly far enough in achieving the department’s objectives. However, by placing small reactors on domestic US military bases, DOD could solve its own energy security quandary—providing assured supplies of secure and constant energy both to bases and possibly the surrounding civilian areas as well. Concerns over reactor safety and security are alleviated by the security already present on installations and the military’s long history of successfully operating nuclear reactors without incident.¶ Unlike reactors on-board ships, small reactors housed on domestic bases would undoubtedly be subject to Nuclear Regulatory Commission (NRC) regulation and certification, however, with strong military backing, adoption of the reactors may prove significantly easier than would otherwise be possible. Additionally, as the reactors become integrated on military facilities, general fears over the use and expansion of nuclear power will ease, creating inroads for widespread adoption of the technology at the private utility level. Finally, and perhaps most importantly, action by DOD as a “first mover” on small reactor technology will preserve America’s badly struggling and nearly extinct nuclear energy industry. The US possesses a wealth of knowledge and technological expertise on SMRs and has an opportunity to take a leading role in its adoption worldwide. With the domestic nuclear industry largely dormant for three decades, the US is at risk of losing its position as the global leader in the international nuclear energy market. If the current trend continues, the US will reach a point in the future where it is forced to import nuclear technologies from other countries—a point echoed by Secretary Chu in his push for nuclear power expansion. Action by the military to install reactors on domestic bases will guarantee the short-term survival of the US nuclear industry and will work to solidify long-term support for nuclear energy.¶ Conclusions¶ In the end, small modular reactors present a viable path forward for both the expansion of nuclear power in the US and also for enhanced US energy security. Offering highly safe, secure, and proliferation-resistant designs, SMRs have the potential to bring carbon-free baseload distributed power across the United States. Small reactors measure up with, and even exceed, large nuclear reactors on questions of safety and possibly on the financial (cost) front as well. SMRs carry many of the benefits of both large-scale nuclear energy generation and renewable energy technologies. At the same time, they can reduce US dependence on fossil fuels for electricity production—moving the US ahead on carbon dioxide and GHG reduction goals and setting a global example. While domestic hurdles within the nuclear regulatory environment domestically have proven nearly impossible to overcome since Three Mile Island, military adoption of small reactors on its bases would provide energy security for the nation’s military forces and may create the inroads necessary to advance the technology broadly and eventually lead to their wide-scale adoption.

**Prevents fast prolif**

Cook 2011 (David Cook, Analyst at National Nuclear Security Administration, MPA from The Ohio State University at the John Glenn School of Public Affairs, “Slowing Atomic Arms Acquisition: More Small Modular Reactors Needed to Combat Nuclear Proliferation,” online)

Reports of Iran seeking to acquire a nuclear weapon are¶ becoming more and more prevalent. Numerous countries are seeking nuclear power and¶ it is vital that the world not export¶ nuclear power to countries that would use¶ that nuclear technology for nefarious ends. The production of nuclear energy, clearly presents inherent security challenges because nuclear material may be used to make nuclear weapons. Countries often defy international norms and pressures that attempt to stop their nuclear proliferation efforts. It is vitally important that these countries not nuclear proliferate. Legislators can take a realistic precaution to ensure that nuclear power used is used for safe purposes. Small modular reactors or SMRs can provide a level of security against nuclear proliferation. Small modular reactors are smaller versions of nuclear plants. These plants can be manufactured in a country that has been traditionally trusted with nuclear power like the United States and sent to other countries that are not traditionally trusted with nuclear power. Legislators need to ensure that more SMR are financed and that the United States takes the lead in the manufacturing process of SMRS to guarantee that the nuclear material needed to produce nuclear energy is safe and secure. Problem? More¶ Countries Are Seeking Nuclear Power¶ More than 80 countries receive technological assistance from the **I**nternational¶ **A**tomic **E**nergy **A**gency. 1 This number is likely to increase as the world turns to nuclear power to meet rising energy needs. While¶ the stalled in¶ America, other countries are turning to nuclear power. As of 2011, there are over 60 nuclear reactors under construction in 14 countries. 2¶ The problem with all of the sudden interest in nuclear power is that all nuclear technology and materials are in inherently “dual use.” Nuclear technology and materials¶ can be used to either to produce energy or enhance a country’s ability to produce nuclear weapons. 3Policy Alternatives¶ The current system that utilizes international inspectors and holding nations to a nuclear non-proliferation treaty is working for a majority of countries, however, this system does not guarantee that countries will not nuclear proliferate. The UN has brought sanctions against Iran for violating the NPT, but these sanctions are not as effective as international leaders hope. A variety of options are available to governments to ensure that countries do not nuclear proliferate.¶ One option is to build more Small Modular Reactors in countries that are newer to the production of nuclear energy. Small Modular Reactors are much smaller than traditional nuclear reactors. The nuclear material is secured safely within these plants and cannot be accessed by anyone once the plant has been manufactured. However, these units may not be made quickly enough and might not provide enough energy to meet the world energy needs.4 Another option is for the IAEA to provide more oversight and inspectors at the nuclear facilities in countries. On the other hand, the IAEA inspectors may not be welcomed in the offending countries and this policy option may not be feasible.¶ Recommendation Finance and Build Small¶ Modular Reactors¶ Legislators can help to ensure the safety of the United States by passing legislation that provides for the financing and building of small modular reactors. These units can be manufactured in countries that have been traditionally trusted with nuclear power and sent to other countries that are not traditionally trusted with nuclear power.¶ SMRs Contain Numerous Safety Features: The reactors contain less nuclear material than traditional power plants, inherently reducing the overall nuclear proliferation risk.¶ SMRS can be built at a factory and the construction of these plants can be overseen safely in a country with a trusted nuclear power background.¶ Light-water SMRs could cool the reactor core in the event of a meltdown even if the power goes out.¶ Nuclear proliferation continues to be a concern to the United States as more countries are acquiring nuclear energy technologies to meet rising energy demands. Numerous countries are seeking nuclear power and it is vital that world not export nuclear power to countries that would¶ use that nuclear technology for nefarious ends. Countries often defy international norms and pressures that attempt to stop their nuclear proliferation efforts.¶ The production and implementation of SMRs to the world nuclear security environment can help to ensure the safety of the United States and the world. Countries all over the globe are turning to nuclear power to meet energy needs in their respective countries and SMRs can help to ensure that nuclear energy is being used for the betterment of the world. It is imperative that the United States takes the lead in ensuring that more SMRs are built and built safely.

#### Ensures global war

Heisbourg 2012 (Francois Heisbourg, chairman of the council of the Geneva Centre for Security Policy and of the International Institute for Strategic Studies, March 4, 2012, “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)

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.

#### And extinction

Kroenig 2012 (Matthew Kroenig, Assistant Professor of Government at Georgetown University and Stanton Nuclear Security Fellow at CFR, May 26, 2012, “The History of Proliferation Optimism: Does It Have A Future?,” <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.

**Loose fissile material in SSA gets stolen**

**Belcher 2011** (Emma L. Belcher, former Stanton nuclear security fellow at the Council on Foreign Relations and MA/PhD from Tufts University, July 2011, “A Nuclear Security Fund,” Council on Foreign Relations, http://www.cfr.org/proliferation/nuclear-security-fund/p25388)

Al-Qaeda and other terrorist groups say they want nuclear weapons and will use them if they can. The most likely acquisition method is to buy or steal fissile material and fashion a crude Hiroshima-style device, provided they have some training in explosives and engineering. Alternatively, a group could use fissile material in a radiological dispersal device, or dirty bomb, which would cause panic, even if it did not cause significant destruction. This makes securing fissile material, and preventing its trafficking if it is stolen, vitally important. There are approximately 1,600 metric tons of highly enriched uranium (HEU) and 400 metric tons of plutonium in over 1,100 civilian and military locations worldwide—enough for many thousands of bombs. The security of these sources varies widely, as does the robustness of measures to prevent smuggling of stolen sources.¶ Though many nations are taking measures to prevent terrorists from acquiring fissile material, others lack the resources or prefer to fund other and—in their view—more pressing problems. This situation is most prevalent in eastern Europe and the Caucasus, where sources of fissile material are concentrated, and in sub-Saharan Africa, where public health and civil strife issues take priority over securing borders against smuggling. Terrorist groups could exploit these critical gaps, thus undermining global nuclear security efforts.

#### They’ll WMD attack the US in the next 2 years- Neg evidence underestimates their capability

Kanani 2011 (Rahim Kanani, founder and editor-in-chief of World Affairs Commentary, Citing Rolf Mowatt-Larssen, Senior Fellow, Belfer Center for Science and International Affairs, John F. Kennedy School of Government, Harvard University, former Director of the Office of Intelligence and Counterintelligence, U.S. Department of Energy, former Chief of the Weapons of Mass Destruction Department, Counter-terrorist Center, Central Intelligence Agency, recipient of the CIA Director’s Award, graduate of the U.S. Military Academy, June 29th, “New al-Qaeda Chief Zawahiri Has Strong Nuclear Intent”, Forbes, http://blogs.forbes.com/rahimkanani/2011/06/29/new-al-qaeda-chief-zawahiri-has-strong-nuclear-intent/)

We should be especially worried about the threat of nuclear terrorism under Zawahiri’s leadership. In a recent report titled “Islam and the Bomb: Religious Justification For and Against Nuclear Weapons”, which I researched for and contributed to, lead author Rolf Mowatt-Larssen, former director of intelligence and counterintelligence at the U.S. Department of Energy, argues that al-Qaeda’s WMD ambitions are stronger than ever. And that “this intent no longer feels theoretical, but operational.” “I believe al-Qaeda is laying the groundwork for a large scale attack on the United States, possibly in the next year or two,” continues Mowatt-Larssen in the opening of the report issued earlier this year by the Belfer Center for Science and International Affairs at Harvard Kennedy School. “The attack may or may not involve the use of WMD, but there are signs that al-Qaeda is working on an event on a larger scale than the 9/11 attack.” Most will readily dismiss such claims as implausible and unlikely, and we hope they are right, but after spending months with Mowatt-Larssen, who also served as the former head of the Central Intelligence Agency’s WMD and terrorism efforts, scrutinizing and cross-referencing Zawahiri’s 268-page treatise published in 2008 titled “Exoneration”, the analytics steered us towards something far more remarkable than expected. “As I read the text closely, in the broader context of al-Qaeda’s past, my concerns grew that Zawahiri has written this treatise to play a part in the ritualistic process of preparing for an impending attack,” states Mowatt-Larssen. “As Osama bin Laden’s fatwa in 1998 foreshadowed the 9/11 attack, Ayman Zawahiri’s fatwa in 2008 may have started the clock ticking for al-Qaeda’s next large scale strike on America. If the pattern of al-Qaeda’s modus operandi holds true, we are in the middle of an attack cycle.” Among several important findings, Zawahiri sophisticatedly weaves identical passages, sources and religious justifications for a nuclear terrorist attack against the United States previously penned by radical Saudi cleric Nasir al Fahd. Indeed, the language used, research cited, and arguments put forth are nothing short of detailed and deliberate. Reading as both a religious duty to kill millions of Americans and a lengthy suicide note together, this piece of literature is something we must take seriously with Zawahiri now at the helm of al-Qaeda. The time may have come for al-Qaeda’s new CEO to leave a legacy of his own. Concluding the author’s note, Mowatt-Larssen states, “Even if this theory proves to be wrong, it is better to overestimate the enemy than to under­estimate him. Conventional wisdom holds that al-Qaeda is spent—that they are incapable of carrying out another 9/11. Leaving aside whether this view is correct, for which I harbor grave doubts, we will surely miss the signs of the next attack if we continue to overestimate our own successes, and dismiss what terrorists remain capable of accomplishing when they put their minds to it.”

**Terrorism causes miscalculation that draws in great powers and culminates in extinction- also causes rising alert levels**

Ayson 2010 (Robert Ayson, Professor of Strategic Studies and Director of the Centre for Strategic Studies: New Zealand at the Victoria University of Wellington, “After a Terrorist Nuclear Attack: Envisaging Catalytic Effects,” Studies in Conflict & Terrorism, Volume 33, Issue 7, July, Available Online to Subscribing Institutions via InformaWorld)

A terrorist nuclear attack, and even the use of nuclear weapons in response by the country attacked in the first place, would not necessarily represent the worst of the nuclear worlds imaginable. Indeed, there are reasons to wonder whether nuclear terrorism should ever be regarded as belonging in the category of truly existential threats. A contrast can be drawn here with the global catastrophe that would come from a massive nuclear exchange between two or more of the sovereign states that possess these weapons in significant numbers. Even the worst terrorism that the twenty-first century might bring would fade into insignificance alongside considerations of what a general nuclear war would have wrought in the Cold War period. And it must be admitted that as long as the major nuclear weapons states have hundreds and even thousands of nuclear weapons at their disposal, there is always the possibility of a truly awful nuclear exchange taking place precipitated entirely by state possessors themselves. But these two nuclear worlds—a non-state actor nuclear attack and a catastrophic interstate nuclear exchange—are not necessarily separable. It is just possible that some sort of terrorist attack, and especially an act of nuclear terrorism, could precipitate a chain of events leading to a massive exchange of nuclear weapons between two or more of the states that possess them. In this context, today’s and tomorrow’s terrorist groups might assume the place allotted during the early Cold War years to new state possessors of small nuclear arsenals who were seen as raising the risks of a catalytic nuclear war between the superpowers started by third parties. These risks were considered in the late 1950s and early 1960s as concerns grew about nuclear proliferation, the so-called n+1 problem. It may require a considerable amount of imagination to depict an especially plausible situation where an act of nuclear terrorism could lead to such a massive inter-state nuclear war. For example, in the event of a terrorist nuclear attack on the United States, it might well be wondered just how Russia and/or China could plausibly be brought into the picture, not least because they seem unlikely to be fingered as the most obvious state sponsors or encouragers of terrorist groups. They would seem far too responsible to be involved in supporting that sort of terrorist behavior that could just as easily threaten them as well. Some possibilities, however remote, do suggest themselves. For example, how might the United States react if it was thought or discovered that the fissile material used in the act of nuclear terrorism had come from Russian stocks,40 and if for some reason Moscow denied any responsibility for nuclear laxity? The correct attribution of that nuclear material to a particular country might not be a case of science fiction given the observation by Michael May et al. that while the debris resulting from a nuclear explosion would be “spread over a wide area in tiny fragments, its radioactivity makes it detectable, identifiable and collectable, and a wealth of information can be obtained from its analysis: the efficiency of the explosion, the materials used and, most important … some indication of where the nuclear material came from.”41 Alternatively, if the act of nuclear terrorism came as a complete surprise, and American officials refused to believe that a terrorist group was fully responsible (or responsible at all) suspicion would shift immediately to state possessors. Ruling out Western ally countries like the United Kingdom and France, and probably Israel and India as well, authorities in Washington would be left with a very short list consisting of North Korea, perhaps Iran if its program continues, and possibly Pakistan. But at what stage would Russia and China be definitely ruled out in this high stakes game of nuclear Cluedo? In particular, if the act of nuclear terrorism occurred against a backdrop of existing tension in Washington’s relations with Russia and/or China, and at a time when threats had already been traded between these major powers, would officials and political leaders not be tempted to assume the worst? Of course, the chances of this occurring would only seem to increase if the United States was already involved in some sort of limited armed conflict with Russia and/or China, or if they were confronting each other from a distance in a proxy war, as unlikely as these developments may seem at the present time. The reverse might well apply too: should a nuclear terrorist attack occur in Russia or China during a period of heightened tension or even limited conflict with the United States, could Moscow and Beijing resist the pressures that might rise domestically to consider the United States as a possible perpetrator or encourager of the attack? Washington’s early response to a terrorist nuclear attack on its own soil might also raise the possibility of an unwanted (and nuclear aided) confrontation with Russia and/or China. For example, in the noise and confusion during the immediate aftermath of the terrorist nuclear attack, the U.S. president might be expected to place the country’s armed forces, including its nuclear arsenal, on a higher stage of alert. In such a tense environment, when careful planning runs up against the friction of reality, it is just possible that Moscow and/or China might mistakenly read this as a sign of U.S. intentions to use force (and possibly nuclear force) against them. In that situation, the temptations to preempt such actions might grow, although it must be admitted that any preemption would probably still meet with a devastating response. As part of its initial response to the act of nuclear terrorism (as discussed earlier) Washington might decide to order a significant conventional (or nuclear) retaliatory or disarming attack against the leadership of the terrorist group and/or states seen to support that group. Depending on the identity and especially the location of these targets, Russia and/or China might interpret such action as being far too close for their comfort, and potentially as an infringement on their spheres of influence and even on their sovereignty. One far-fetched but perhaps not impossible scenario might stem from a judgment in Washington that some of the main aiders and abetters of the terrorist action resided somewhere such as Chechnya, perhaps in connection with what Allison claims is the “Chechen insurgents’ … long-standing interest in all things nuclear.”42 American pressure on that part of the world would almost certainly raise alarms in Moscow that might require a degree of advanced consultation from Washington that the latter found itself unable or unwilling to provide. There is also the question of how other nuclear-armed states respond to the act of nuclear terrorism on another member of that special club. It could reasonably be expected that following a nuclear terrorist attack on the United States, both Russia and China would extend immediate sympathy and support to Washington and would work alongside the United States in the Security Council. But there is just a chance, albeit a slim one, where the support of Russia and/or China is less automatic in some cases than in others. For example, what would happen if the United States wished to discuss its right to retaliate against groups based in their territory? If, for some reason, Washington found the responses of Russia and China deeply underwhelming, (neither “for us or against us”) might it also suspect that they secretly were in cahoots with the group, increasing (again perhaps ever so slightly) the chances of a major exchange. If the terrorist group had some connections to groups in Russia and China, or existed in areas of the world over which Russia and China held sway, and if Washington felt that Moscow or Beijing were placing a curiously modest level of pressure on them, what conclusions might it then draw about their culpability? If Washington decided to use, or decided to threaten the use of, nuclear weapons, the responses of Russia and China would be crucial to the chances of avoiding a more serious nuclear exchange. They might surmise, for example, that while the act of nuclear terrorism was especially heinous and demanded a strong response, the response simply had to remain below the nuclear threshold. It would be one thing for a non-state actor to have broken the nuclear use taboo, but an entirely different thing for a state actor, and indeed the leading state in the international system, to do so. If Russia and China felt sufficiently strongly about that prospect, there is then the question of what options would lie open to them to dissuade the United States from such action: and as has been seen over the last several decades, the central dissuader of the use of nuclear weapons by states has been the threat of nuclear retaliation. If some readers find this simply too fanciful, and perhaps even offensive to contemplate, it may be informative to reverse the tables. Russia, which possesses an arsenal of thousands of nuclear warheads and that has been one of the two most important trustees of the non-use taboo, is subjected to an attack of nuclear terrorism. In response, Moscow places its nuclear forces very visibly on a higher state of alert and declares that it is considering the use of nuclear retaliation against the group and any of its state supporters. How would Washington view such a possibility? Would it really be keen to support Russia’s use of nuclear weapons, including outside Russia’s traditional sphere of influence? And if not, which seems quite plausible, what options would Washington have to communicate that displeasure? If China had been the victim of the nuclear terrorism and seemed likely to retaliate in kind, would the United States and Russia be happy to sit back and let this occur? **In the charged** atmosphere immediately after a nuclear terrorist attack, how would the attacked country respond to pressure from other major nuclear powers not to respond in kind? The phrase “how dare they tell us what to do” immediately springs to mind. Some might even go so far as to interpret this concern as a tacit form of sympathy or support for the terrorists. This might not help the chances of nuclear restraint.

### 1AC Afghanistan Adv

#### Four reasons grid collapse is inevitable

Overload

Weather

Cyber attacks

Supply disruption

DSB Taskforce 2008 (Defense Science Board Task Force, Federal Advisory Committee established to provide independent advice to the Secretary of Defense, Tom Morehouse, editor, February 2008, Office of the Under Secretary of Defense For Acquisition, Technology, and Logistics, http://www.acq.osd.mil/dsb/reports/ADA477619.pdf)

The first risk is from overload. As wires become overloaded, they heat up and sag, making them vulnerable to entanglement with trees and other objects. This happened near Cleveland, Ohio on August 14, 2003. According to the U.S.-Canada Power System Outage Task Force, high demand caused a high-voltage line to come in contact with overgrown trees. The resulting cascade of failures plunged many of the 50 million people in the Northeast U.S. and Canada living in an area covering 9,300 square miles into darkness. It shut down more than 500 generating units at 265 power plants, including 22 nuclear plants.29¶ A second risk comes from natural disasters, such as hurricanes, tornadoes, electrical storms or other extreme weather events. The consequences could be very much as described above, but with the added risk of physical damage to the infrastructure. Favorable commentary about the performance of the grid following the August 2003 outage focused on the fact that restoration occurred fairly quickly. Within a few days power was restored virtually everywhere, with much of the area back up within a few hours. This was largely because safety features built into the grid successfully prevented damage to critical equipment such as generators, breakers and transformers. 30 However, the Task Force is concerned that such an extensive outage could be caused by such a commonplace event – a single line contacting a tree. This inevitably raises the next issue below: what the result might have been had there been physical damage to infrastructure, such as from a deliberate attack by knowledgeable adversaries?¶ A third risk comes from sabotage or terrorist activity, whether local, trans-national, or state-sponsored, and including both conventional and nuclear attack. Nuclear attack could take place either directly or through the generation of a high altitude electromagnetic pulse (EMP). The grid is a relatively easy target for a terrorist. It is brittle, increasingly centralized, capacity-strained, and largely unprotected from physical attack, with little stockpiling of critical hardware. Although the system is designed to survive single points of failure, increasing demand on the system and increasing network constraints make multiple points of failure more likely. These are difficult to anticipate and more likely to result in cascading outages and catastrophic outages that cover large areas for long periods of time. Network Single Points of Failure (NSPF) are abundant. High voltage transformers, breakers, and other long-lead time items are particularly critical system elements.31 They can be easily targeted and destroyed. Grid sections could be taken down for months even if replacement transformers and breakers could be found; or for years if certain components need to be newly manufactured and transported. There are only limited backups located around the country—generally co-located with operating equipment. For some of the largest equipment, there is no domestic supply and only limited overseas production capacity which is fully booked years ahead. 32 For example, 765 kV transformers are manufactured only by one company in Canada. Armed with the right knowledge, a small number of people could shut down electricity over significant areas for an extended period of time, including power to critical DoD missions. The grid is not designed to withstand a coordinated multi-pronged or wide-area attack.33 The Task Force noted that attacks on the grid are one of the most common and effective tactics of insurgents in Iraq, and are increasingly seen in Afghanistan.34¶ In addition to physical attacks on the grid, there is the potential for cyber attacks. U.S. grid control systems are continuously probed electronically, and there have been numerous attempted attacks on the Supervisory Control and Data Acquisition (SCADA) systems that operate the grid. None have yet resulted in major problems in the U.S., but the potential exists for major outages in the same way successful hackers can disrupt computer networks.35 Further details regarding the potential for deliberate attacks to the grid and their potential consequences are contained in a classified annex to this report.¶ A fourth risk comes from interruptions in supplies to generating plants, which can be caused by natural events, infrastructure failures, attack or even market forces. This occurred in California during 2000 and 2001 when supplies of natural gas were interrupted and forced a reduction in electricity generation.36 Approximately 20% of U.S. electricity is generated by natural gas and market prices have swung wildly over the past several years.37 Approximately 52% of U.S. electricity is generated by coal and transportation routes that move coal from mines to generating plants are sometimes remote and lacking in alternatives. Critical rail lines or bridges could be taken out by determined saboteurs. For example, in May 2005, 43 rail cars came off the tracks. The disruption to coal deliveries caused prices to spike, and raised electricity prices by 6% nationally, according to the Bureau of Labor Statistics. The 100 mile length of rail line through Wyoming that carries the output of the Western coal belt to power plants is the most heavily traveled in the nation.38 So in addition to risks from grid outage, there are risks to the supply chain that enables the grid to work—not least from electricity supply failures themselves, which could disable the pipelines and controls used by other forms of energy, notably oil and gas.

#### Collapses drone operations in Afghanistan

Aimone 2012 (Michael Aimone, Director¶ Business Enterprise Integration¶ Office of the Deputy Under Secretary of Defense, September 12, 2012, Testimony Before the House Committee on Homeland Security¶ Subcommittee on Cybersecurity, Infrastructure Protection and Security Technologies, http://homeland.house.gov/sites/homeland.house.gov/files/Testimony%20-%20Aimone.pdf)

DoD’s facility energy strategy is also focused heavily on grid security in the name of mission assurance. Although the Department’s fixed installations traditionally served largely as a platform for training and deployment of forces, in recent years they have begun to provide direct support for combat operations, such as unmanned aerial vehicles (UAVs) flown in Afghanistan from fixed installations here in the United States. Our fixed installations also serve as staging platforms for humanitarian and homeland defense missions. These installations are largely dependent on a commercial power grid that is vulnerable to disruption due to aging infrastructure, weather-related events, and potential kinetic, cyber attack. In 2008, the Defense Science Board warned that DoD’s reliance on a fragile power grid to deliver electricity to its bases places critical missions at risk.1

#### Drones key to contain insurgents

Dale 2011 (Catherine Dale, specialist in international security at the Congressional Research Service, March 9, 2011, “War in Afghanistan: Strategy, Operations, and Issues for Congress,” http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA542626)

By 2008, President Bush had reportedly authorized U.S. military cross-border operations into Pakistan, by ground or Predator unmanned aerial vehicles (UAV).210 Neither the Central Intelligence Agency nor the U.S. military officially confirms the use of the drone strikes.¶ To be clear, NATO’s policy for ISAF does not include cross-border strikes. Asked in July 2008 whether the Alliance would go after militants in Pakistan, Secretary-General Jaap de Hoop Scheffer said, “My answer is an unqualified ‘no.’ We have a United Nations mandate for Afghanistan and that’s it. If NATO forces are shot at from the other side of the border, there is¶ always the right to self-defense but you will not see NATO forces crossing into Pakistani territory.”211¶ According to publicly available reporting, based primarily on accounts from people on the ground, a major early focus of the drone strikes was the South Waziristan agency in the FATA, long the home base for the TTP, the Pakistani Taliban umbrella organization; a drone strike killed TTP leader Baitullah Mahsud in August 2009. Subsequently, the focus of the drone strikes shifted to the North Waziristan agency, understood to be the stronghold of the Haqqani network, one of the major insurgencies active in Afghanistan. Observers have suggested that under the Obama Administration, the frequency of the drone attacks has increased markedly.212¶ Senior ISAF officials have noted that cross-border attacks have yielded big operational and tactical benefits for the campaign in Afghanistan—by causing the insurgent networks to feel disconnected, and by prompting local residents in Pakistan to want al Qaeda and other outsiders to leave their communities.213

#### Even after 2014 drones key to contain Taliban and prevent Afghan collapse

Singh 10/3 (Colonel Ajay Singh, October 3, 2012, “Afghanistan 2014 and Beyond,” South Asia Defence and Strategic Review, http://www.defstrat.com/exec/frmArticleDetails.aspx?DID=368)

When President Obama announced the termination of military operations in Afghanistan post 2014, he followed it up by saying, “In the pre-dawn darkness of Afghanistan we can see the light of a new day”. But then, perhaps he was just using his superb powers of oratory and his felicity with the language to justify the termination of US military operations in Afghanistan from December 2014. There is a grey darkness in Afghanistan now a prolonged dark interspersed with flashes of bombings and attacks. Yet, is this period - an uncertain, tentative period before the US completes its withdrawal, the dark of a pre-dawn era or the even more chilling darkness of another long, desolate night.¶ President Obama does seem to put timelines on his operations and so far most of these timelines have been adhered to. In July, at the NATO Chicago conference he announced that the US and NATO will end all combat operations by December 2013 and withdraw all troops less those engaged in essential security and advisory roles by 31 December 2014. This effectively draws the curtain on America's longest and most expensive war, one which has cost over $ 3 Trillion and claimed over 3600 lives. The fatigue of 12 years of inconclusive conflict is telling on the US and its allies. No President, especially in an election year, wants to face a mandate which is deeply against an unpopular war. Perhaps the timing of President Obama's withdrawal announcement has a lot to do with the US elections in November 2014. ¶ Yet it is not a complete withdrawal as such. The US will leave behind an estimated 20,000-30,000 troops in training and advisory duties and still retain some of its major bases to assist the Afghan National Security Force in counter terrorist actions. Bagram and Shamsi Air Fields will also be retained to launch continual drone attacks in Afghanistan and Pakistan. But will it suffice to ensure the stability of the war-torn nation and prevent it from slipping into chaos. Many fear a repeat of the post Soviet withdrawal period a vacuum of power that plunged the nation in to a civil war and brought the Taliban into power. The scenario in Afghanistan, post 2014, may not be so bleak, but the US withdrawal will definitely cause a power shift that will impact the entire region.¶ For one, the US aims in Afghanistan are not really completed. When it rushed into Afghanistan to extract retribution for the 9/11attacks, the immediate aim was the destruction of Al-Qaeda and its Taliban allies. Today it can claim to have virtually removed Al-Qaeda from Afghanistan. Osama Bin Laden has been spectacularly eliminated. Virtually the entire leadership has been wiped out in a series of drone attacks. Only the spiritual head, Al Zawahiri remains. Many of their cadres have shifted base towards Somalia and Yemen. Yet if Al Qaeda has been contained to a great extent, the Taliban is as active if not much more, as ever. The US policy of focusing exclusively on Al-Qaeda let the Taliban regroup after its initial reverses. Today, the major militant presence in Afghanistan is not of Al Qaeda, but the Taliban, which is gearing up for the post US withdrawal scenario. Gradually they have taken over the areas of Helmand, Ghazni and Anbar which have been vacated by NATO troops. As they consolidate, the fear is that, post 2014, they will simply step back into Afghanistan and regain power in the same manner that they did in the wake of the Soviet withdrawal.¶ The signs do seem to indicate that the Taliban are gearing up for a sustained offensive that will set the grounds for them to eventually come into power after the US withdrawal. There has been an intensification of attacks significantly almost all by the Taliban and none by Al Qaeda - in the period following the announcement of the withdrawal. There have been 34 major attacks with the deadliest being on the eve of the Id festival which killed over 50 Shai worshippers in their shrines. This is a grim reminder of the Taliban's propensity to target the minority Shia community, especially the Hazaras. The increase in their attacks also corresponds to the reduction in operations launched by NATO forces. As part of the pre-withdrawal plans, most operations, especially night operations are now conducted by the Afghan National Army and local police, with US forces in a advisory or supporting role. The linchpin of the US policy post 2014 is to develop the Afghan National Security Force to be strong enough to ensure the security of their own country. But at the moment, in spite of the huge investments in training and equipping the Afghan army, it does not seem to be up to the task. It was estimated that an Afghan Security Force of 3,52,000 would be required to ensure continual security. This figure was pruned down to 2,30,000 because of the exorbitant costs of $ 6 billion per year. (With the new figure, the price tag will drop to $ 4 billion per year). This parsimony may be a mistake in the long term. Even with 1,30,000 US troops already in the country, the Afghan Security Forces have been unable to curb the Taliban. After the withdrawal, even with a residual force of 20-30000 US troops, will the ANSF be able to resist a full-fledged Taliban offensive to take over their country.¶ There are other ominous signs. Taliban infiltration in the Security force is fairly rampant. There has been a series of attacks NATO troops from their local allies in the Afghan Security force. These “Green on Blue” attacks have claimed 45 NATO soldiers and wounded 69 others in this calendar year itself. Most of these attacks have been attributed to Taliban infiltration in the security forces. In fact, just last week NATO suspended training of the Afghan Local Police after a series of 12 insider attacks in the month of August alone. All this is not a happy augury for the capabilities of the Afghan Security Force to hold their country together post 2015, though in the long run, Afghanistan's security must be ensured by Afghans themselves. ¶ The US is taking pains to ensure that they still have a continual stake in Afghanistan's security so that it is not simply abandoned post 2014. The US signed a Strategic Partnership Agreement with Kabul that is valid for a decade after 2014 and assures it of continual US support. Afghanistan was also granted Major Non NATO Ally status in July thus giving it entry into a select club that includes Israel, Japan, Pakistan and South Korea. This will provide Afghanistan special privileges such as access to military equipment, training facilities and special grants. Surveillance and fire power capabilities will be provided. Drone and air attacks on militant hide outs on both sides of the Durand Line will continue. But in spite of the supporting role that the US will still play, will Anti-Taliban operations have the same momentum- especially when the operations will now be conducted by the Pushtoon dominated military against their own tribal brethren.

#### Afghanistan failure causes WWIII great power war

Fox 2011 (Robert Fox, international reporter and associate at the Corriere della Sera in Milan, July 12, 2011, “Afghanistan: If we’re not careful, WW3 is imminent,” The Week, http://goo.gl/PlUTV)

There are growing fears that a speedy withdrawal of western troops from Afghanistan, accompanied by a fudged deal to bring the Taliban back into power in some sort of coalition, could trigger another dreadful round of civil war. And, given the meddling already undertaken by neighbours such as Pakistan and Iran, this civil war could quickly become a regional war. This in turn could morph into a contest of global significance between India and China and their proxies and allies. In short, welcome to the Third World War in the 21st century. There is a list of concerns which suggest this might happen. First there is the endemic corruption in Kabul under President Karzai. This is about to be highlighted by the IMF's attempt to sort out the crash of the Kabul Bank, with a loss of some $700 million. The problem is not just the Kabul bank, but banks in general across Afghanistan, which the kleptocrats of Kabul seem to regard as their personal piggy banks. Then there is Karzai himself, who seems to be trying to bend or break the constitution so he can run for a third term in two years' time – banned under the present rules. The armed services and police are also a concern. Though recruiting and training have made huge strides, with more than 250,000 under arms now, there are worries about the continuing imbalance between the different ethnic groups, with the Tajiks and Hazara over-represented, and the recruiting of southern Pashtuns still limping. The danger is that the Afghan army will split on ethnic lines when Afghanistan gains full control of its security in 2015. In a civil war, the southern Pashtuns would turn to the Pakistan army and ISI intelligence service, who are more deeply involved in backing Islamist militants than previously thought, according to some devastating reports for the New York Times by Carlotta Gall.

#### Drones crush terrorists and solve militant takeover in Pakistan

**Nadim 2012** (Hussain Nadim, visiting scholar at the Woodrow Wilson Center, August 8, 2012, "How Drones Changed the Game in Pakistan," National Interest, nationalinterest.org/how-drones-changed-the-game-pakistan-7290)

Regardless of what the news agencies in Pakistan claim about the negative effects of drone strikes, the weapon is proving to be a game changer for the U.S. war on terrorism. And surprisingly, the Pakistani Army quietly admits to this fact. Just the way Stinger missiles shifted the balance of power in favor of the United States in the 1980s, drones are producing the same results.¶ The critics of unmanned strikes, who claim that drones are contributing to growing radicalization in Pakistan, haven’t looked around enough—or they would realize that much of the radicalization already was established by the Taliban in the 1990s. The real tragedy is that it is acceptable for the Taliban to radicalize and kill, but it is considered a breach of sovereignty for the United States, in pursuit of those radicalizing Pakistan’s people, to do the same.¶ There is so much protest over the drones because the media reports about them are biased. Although people on ground in war zones contend that the drone strikes have very few civilian casualties and, with time, have become extremely precise, the media presents quite a different story to boost its ratings.¶ Many in Pakistan, especially in the army, understand the positive impact of this weapon. Drones are coming in handy for two reasons: their precision and psychological effect. Many analysts of this subject have been concerned only with the military aspect, such as whether or not drones are precise enough and the casualties they incur. But part of what works in favor of the United States is the psychological impact—the fear that drones have instilled in the militants. The fact that the United States might strike day or night, inside the militant compound or outside while traveling in the convoys, works to deter militants and restrict their operations. This tilts the balance of power in favor of the United States.¶ Most of the people in the Pakistani Army whom I interviewed on the subject were positive about the drone strikes and their direct correlation with a decrease in terrorist attacks in Pakistan. The majority focused on the psychological impact of the drones and how they have put militants on the run, forcing them to sleep under trees at night, though it must be said that army officials showed some concern about cases in which the same psychological impact is experienced by civilians.¶ Locals I talked to are frustrated over the fear that they might get hit by a drone if the militants are hiding in their neighborhood. But this frustration may have a positive impact as it motivates civilians to flush out and close doors to militants who seek refuge in their areas.¶ Surprisingly, there isn’t as much anti-Americanism as one would suspect in areas where the United States is conducting drone strikes, largely because the locals are fed up with the influx of militants in their areas and have suffered because of terrorism. However, urban centers, which have suffered the least from terrorism, are far more radicalized and anti-American. Hence, we see large anti-drone rallies in the cities of Punjab, where people have little first-hand experience with drones. The anti-American lot in these places will start a rally for any reason at all as long as they get to burn a few American flags.

#### Nothing else stopping Pakistan collapse loose nukes

Thiessen 2012 (Marc A. Thiessen, AEI fellow and member of the White House senior staff under President George W. Bush, March 19, 2012, “Five disasters we’ll face if U.S. retreats from Afghanistan,” Washington Post, http://www.washingtonpost.com/opinions/five-disasters-well-face-if-us-retreats-from-afghanistan/2012/03/19/gIQA04zCNS\_story\_1.html)

1. The drone war against al-Qaeda in Pakistan would likely cease. Eighty-three percent of Americans support targeted drone strikes against al-Qaeda leaders hiding in the tribal regions of Pakistan. Those strikes are dependent on forward bases in Afghanistan near the Pakistani border. The U.S. no longer operates drones from inside Pakistan. We cannot effectively conduct targeted strikes from Navy ships because Pakistan’s tribal regions are more than a thousand of miles from the sea. Bagram airbase near Kabul is also too far away for anything other than dropping bombs from F-15s. spotiSo if we want to continue the drone war against al-Qaeda, we must have a U.S. military presence not just in Afghanistan but in the Pashtun heartland — and we can’t have that presence if the Pashtun heartland is on fire. The Afghan government is not likely to allow us to keep bases in this area if we were doing nothing to stabilize the country. And if the region falls to the Taliban, we will lose access to these areas completely. Loss of these bases would also mean the loss of the intelligence networks on both sides of the border enabled by the U.S. military presence — and thus much of the targeting information we depend on. As a result, direct strikes in Pakistan could effectively cease, the pressure on the terrorists would be lifted, and al-Qaeda would be free to reconstitute.¶ 2. The risk that Pakistan (and its nuclear arsenal) falls to the extremists grows. With the pressure from the United States lifted, al-Qaeda and the Pakistani Taliban would be free to ramp up their efforts to destabilize Pakistan. In a worst-case scenario, they could topple the government and take control of Pakistan’s nuclear arsenal. In a “best-case” scenario, those within the Pakistani government who supported cooperating with the United States will be weakened, while those who have long argued for supporting the Islamists and terrorists against the United States will be strengthened. Either way, Pakistan becomes a facilitator of terror.

#### Pakistani militants cause Indo-Pak war

Vira and Cordesman 2011 (Varun Vira and Anthony H. Cordesman, “Pakistan: Violence vs. Stability,” CSIS, http://goo.gl/ZyS4q)

These conflicts have been augmented by violence and tensions inside the rest of Pakistan. In south Punjab, a historical hotbed of militancy, various groups once firmly tethered to state policy have begun to splinter and migrate to the tribal areas. These groups have considerable experience in combat and knowledge of the weapons and technologies needed for asymmetric warfare. They have joined tribal militant groups, and assisted them in bringing terrorist violence into the previously insulated urban centers of the Punjab and the Sindh. In Karachi, a key economic engine of Pakistan, ethno-sectarian violence has risen to new levels with the real danger of a slide back into the communal violence of the early 1990s. Such a reversal would be catastrophic for stability, exacerbating already chronic economic woes, whilst providing fodder for the sectarian and ethnic drivers of conflict in Pakistan. In Baluchistan, a fifth separatist insurgency has become more active since 2004, and is closely linked and influenced by regional geopolitics. The Baloch insurgency is distinct from other conflicts, primarily in that Sunni-Deobandi philosophies play little role, but it nonetheless benefits from many of the same drivers, including widespread impoverishment, chronic underdevelopment and alienation from mainstream Pakistan. The Challenges of External Relations Pakistan‟s focus on the challenge from India affects virtually every aspect of its external relations. This plays out in Afghanistan in the form of a competition for influence over the Afghan government where Pakistan attempts to use its ties to the Afghan Taliban, Haqqani network, and other movements to ensure its influence over the future of Afghanistan and to limit any threat of Pashtun independence movements. The end result is a fundamentally different perception of Pakistan‟s national interest from the US focus on Afghan security and stability. It is the reality behind the rhetoric of “ally” and “strategic partner” that has led to constant tension with the US. Cross-border violence into Afghanistan is a major irritant, and has resulted in deteriorating US-Pakistani relations. Similarly, the Indo-Pakistani border is one of the most tense on the planet, and secured on both sides by nuclear weapons. Cross-border violence into India can greatly escalate the prospects of large-scale war. Many Kashmiri militant groups have splintered, as in south Punjab, and the growing risk of militant proxies operating autonomously cannot be discounted, particularly to divert Pakistani military attention away from the tribal areas.

#### Guaranteed escalation: Miscalc, flight times, devolved authority, no stable deterrent

Yusuf 2011 (Moeed Yusuf, South Asia adviser at the United States Institute of Peace Center in the Center for Conflict Analysis and Prevention, January 25, 2011, “Stability in the Nuclear Context: Making South Asians Safe,” Jinnah Institute, http://goo.gl/FwYXH)

Crises between Pakistan and India represent a quantum leap in terms of the induction of instability inducing factors relevant to the nuclear calculus. To begin with, every crisis carries with it a realistic possibility of uncontrolled escalation leading to a deliberate or inadvertent nuclear strike. Not to mention, in the South Asian context, escalation represents uncharted territory, a dangerous proposition given that no escalation control mechanisms have been institutionalized. Yet, crises remain highly likely for more than one reason. There are outstanding contentious issues between the two sides which keep forcing them to the verge of a diplomatic breakdown. Moreover, both sides seem to believe that limited aggression under the nuclear umbrella is permissible and will not warrant a nuclear response. India’s limited war doctrine, Cold Start, formalizes this belief while Pakistan’s propensity to employ non-state actors on Indian soil in the past underscores its traditional propensity for similar risk taking. 12 In the absence of clearly defined nuclear red lines, it is very difficult to determine just what constitutes as ‘limited aggression’ for either side. A number of simulations the author has been part of point to wide divergence in how the two sides view the situation. Finally, nonstate actors are no longer playing to the tune of the Pakistani state and can engineer a Pakistan-India crisis on their own, Mumbai being a pertinent example. Most analysts suggest that a repeat of such an episode will see some form of Indian aggression followed by a Pakistani counterresponse; 13 what follows is anybody’s guess but it may well entail further escalation at a swift pace during which either side may cross the other’s nuclear red lines. In an escalated conflict, survivability of Indian and Pakistani nuclear arsenals shall remain intact and pre-emption against the nuclear forces would still be a far cry, even from the stronger party, India. Given Pakistan’s mobile delivery systems and a significant number of warheads, it would be impossible for New Delhi to guarantee that the entire arsenal will be successfully neutralized in a pre-emptive strike. This would hold even if Pakistan deployed its weapon systems during the course of an escalation. That said, there are two potential dangers in crisis situations. First, Pakistan and India use dualpurpose missiles and air craft for delivery. In the absence of advanced early warning capabilities, an incoming aircraft or missile could well be perceived as an attempt at pre-emption. The defender may panic and consider launching its own strike before it is too late. Second, it is worth pointing out the vulnerability of Pakistan’s nuclear decision making chain of command. Pakistan’s entire government and military top brass sit within 50 miles in Islamabad/Rawal Pindi and could potentially be neutralized in a pre-emptive strike that seeks to decapitate the country’s nerve center. For those who see this as rather farfetched – the author included – the concern is not as much that such an Indian strike would materialize but that Pakistani decision makers would have considered this possibility in their own contingency planning and taken precautionary measures. In the absence of a bilateral agreement that outlaws pre-emption of the nuclear chain of command, Pakistan may consider dispersing its leadership geographically or even devolving authority of launch to a lower level ex ante. A dispersed NCA amidst the fog of war would find it very difficult to make an informed decision while devolved authority would add to the risk of a premature or miscalculated launch. The challenge of preventing unauthorized or inadvertent launches increases multifold and crystallizes the kind of dangers India and Pakistan may end up subjecting their populations to in crisis situations. Their command and control structures may be robust enough to hold in peace time but the doctrinal and geographical asymmetries transform the equation under the stress of crises. For one, even in the absence of a sea-based capability which has to be constantly deployed for full effect, both sides would inevitably contemplate mating and subsequently deploying their ground and air based assets as a crisis escalates. This implies transportation, wide dispersal, ground preparations which may be misconstrued as an imminent attack by the adversary, and even predelegation of authority to launch. Pakistan, espousing ‘First Use’ and more vulnerable to total annihilation, will be more susceptible to these pressures. 14 In any case, all this adds significantly to the demands on the command and control structure: it necessitates safe transportation in an accident-prone, hot and dry South Asian climate, robust and authenticated communication systems and fool proof, redundant launch protocols under stressful situations. It remains unclear how much confidence the two sides have in their respective mechanisms but the very fact that they have never been tested in real life conditions make malfunctions quite likely if an escalated conflict is experienced. The possibility of a miscalculation in the South Asian case is also substantial given the geographical contiguity between Pakistan and India. The Cold War rivals had the luxury of sitting thousands of miles away and factoring in a decision time of over half an hour in any eventuality. In South Asia, the flight times for missiles between major urban cities are 5-15 minutes. In essence, there is virtually no time for informed decision making; the possibility of making overly conservative judgments about the other side’s intentions during a crisis, and subsequently of premature decisions, is therefore much greater than during the Cold War. This is especially true given that decision makers on both sides already suffer from acute cognitive dissonance about the other. Interestingly enough, even the usually cited remedy, an advanced early warning capability, may not deliver in South Asia; Pakistan and India are geographically too close for the technology to be able to work meaningfully. 15

### 1AC Plan

#### Plan: The United States Federal Government should offer substantial competitive power purchase agreements for electricity from small modular nuclear reactors for military installations in the United States.

### 1AC Solvency

**No disads- Lots of SMR funding now, Obama’s committed**

Biello 2012 (David Biello, journalist at Scientific American, April 19, 2012, Missourians for a Better Energy Future, http://www.moenergyfuture.org/news/small-reactors-make-a-bid-to-revive-nuclear-power/)

Small may be beautiful for the nuclear power industry So argue a host of would-be builders of novel nuclear reactors. While the U.S. government has not given up on investing in large units that boast conventional designs, the Department of Energy has also announced the availability of $450 million in funds to support engineering and licensing of so-called "small modular reactors."¶ "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," said Secretary of Energy Steven Chu in a statement announcing the funding, which aims to get such modular reactors hooked into the grid by 2022. "The Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing."

**But the DOD’s key- Only way to solve barriers and achieve commercialization**

Andres and Breetz 2011 (Richard B. Andres, Professor of national Security Strategy at the national War College and a Senior fellow and energy and environmental Security and Policy Chair in the Center for Strategic research, institute for national Strategic Studies, at the national Defense University, and Hanna L. Breetz, doctoral candidate in the Department of Political Science at the Massachusetts institute of technology, February 2011, “Small Nuclear Reactors for Military Installations: Capabilities, Costs, and Technological Implications,” National Defense University Strategic Forum, http://www.ndu.edu/press/lib/pdf/strforum/sf-262.pdf)

The preceding analysis suggests that DOD should seriously consider taking a leadership role on small reactors. This new technology has the potential to solve two of the most serious energy-related problems faced by the department today. Small reactors could island domestic military bases and nearby communities, thereby protect- ing them from grid outages. They could also drastically reduce the need for the highly vulnerable fuel convoys used to supply forward operating bases abroad.¶ The technology being proposed for small reactors (much of which was originally developed in U.S. Gov- ernment labs) is promising. A number of the planned designs are self-contained and highly mobile, and could meet the needs of either domestic or forward bases. Some promise to be virtually impervious to accidents, with design characteristics that might allow them to beused even in active operational environments. These re- actors are potentially safer than conventional light wa- ter reactors. The argument that this technology could be useful at domestic bases is virtually unassailable. The argument for using this technology in operational units abroad is less conclusive; however, because of its poten- tial to save lives, it warrants serious investigation.¶ Unfortunately, the technology for these reactors is, for the most part, caught between the drawing board and production. Claims regarding the field utility and safety of various reactors are plausible, but authoritative evalu- ation will require substantial investment and technology demonstration. In the U.S. market, DOD could play an important role in this area. In the event that the U.S. small reactor industry succeeds without DOD support, the types of designs that emerge might not be useful for the department since some of the larger, more efficient designs that have greater appeal to private industry would not fit the department’s needs. Thus, there is significant incentive for DOD to intervene to provide a market, both to help the industry survive and to shape its direction.¶ Since the 1970s, in the **U**nited **S**tates, **only the military** has overcome the considerable barriers to building nuclear reactors. This will probably be the case with small reactors as well. If DOD leads as a first mover in this market—initially by providing analysis of costs, staffing, reactor lines, and security, and, when possible, by moving forward with a pilot installation—the new technology will likely survive and be applicable to DOD needs. If DOD does not, it is possible the tech- nology will be unavailable in the future for either U.S. military or commercial use.

#### Only PPAs solve-

#### Incentivizes production- R&D projects don’t commercialize

Madia 2012 (William Madia, Chairman of the Board of Overseers and Vice President for the SLAC National Accelerator Laboratory at Stanford University, previously the Laboratory Director at the Oak Ridge National Laboratory, Spring 2012, “SMALL MODULAR REACTORS: A POTENTIAL GAME-CHANGING TECHNOLOGY,” Stanford Energy Club, http://energyclub.stanford.edu/index.php/Journal/Small\_Modular\_Reactors\_by\_William\_Madia)

Throughout the history of NPP development, plants grew in size based on classic “economies of scale” considerations. Bigger was cheaper when viewed on a cost per installed kilowatt basis. The drivers that caused the industry to build bigger and bigger NPPs are being offset today by various considerations that make this new breed of SMRs viable. ¶ ¶ Factory manufacturing is one of these considerations. Most SMRs are small enough to allow them to be factory built and shipped by rail or barge to the power plant sites. Numerous industry “rules of thumb” for factory manufacturing show dramatic savings as compared to “on-site” outdoor building methods. Significant schedule advantages are also available because weather delay considerations are reduced. Of course, from a total cost perspective, some of these savings will be offset by the capital costs associated with building multiple modules to get the same total power output. Based on analyses I have seen, overnight costs in the range of $5000 to $8000 per installed kilowatt are achievable. If these analyses are correct, it means that the economies of scale arguments that drove current designs to GW scales could be countered by the simplicity and factory-build possibilities of SMRs.¶ ¶ No one has yet obtained a design certification from the Nuclear Regulatory Commission (NRC) for an SMR, so we must consider licensing to be one of the largest unknowns facing these new designs. Nevertheless, since the most developed of the SMRs are mostly based on proven and licensed components and are configured at power levels that are passively safe, we should not expect many new significant licensing issues to be raised for this class of reactor. Still, the NRC will need to address issues uniquely associated with SMRs, such as the number of reactor modules any one reactor operator can safely operate and the size of the emergency planning zone for SMRs.¶ ¶ To determine if SMRs hold the potential for changing the game in carbon-free power generation, it is imperative that we test the design, engineering, licensing, and economic assumptions with some sort of public-private development and demonstration program. Instead of having government simply invest in research and development to “buy down” the risks associated with SMRs, I propose a more novel approach. Since the federal government is a major power consumer, it should commit to being the “first mover” of SMRs. This means purchasing the first few hundred MWs of SMR generation capacity and dedicating it to federal use. The advantages of this approach are straightforward. The government would both reduce licensing and economic risks to the point where utilities might invest in subsequent units, thus jumpstarting the SMR industry. It would then also be the recipient of additional carbon-free energy generation capacity. This seems like a very sensible role for government to play without getting into the heavy politics of nuclear waste, corporate welfare, or carbon taxes.

**Certainty- PPAs vital to investment and financing**

Hinckley 2012 (Elias Hinckley, Energy Attorney and leader of the clean energy practice at Kilpatrick Townsend, August 29, 2012, “5 Reasons Why Good Energy Projects Don’t Get Financed,” [www.consumerenergyreport.com/2012/08/29/5-reasons-why-good-energy-projects-dont-get-financed/](http://www.consumerenergyreport.com/2012/08/29/5-reasons-why-good-energy-projects-dont-get-financed/))

Much of the market uncertainties in a typical energy project can be partially managed by a long-term fixed price off-take contract (such as a power purchase agreement), which shields an investor from most price volatility risk. For example, a solar developer can assume payment, at a known price, for electricity it generates if that electricity is sold under a solid long-term power purchase agreement. The project will receive the expected revenue regardless of the price movement of electricity, which allows for revenue certainty and protection for the project in the event prices drop below levels used to calculate project returns. Where a long term contract is not available, an alternative strategy is to add a hedge (which is an instrument that acts as an offset or guarantee against the price going up or down). However, hedging is generally difficult to do beyond a few years, and since project performance is often measured over 10 to 20 years it often only manages price risk during the early operation of a project. When building a typical energy project, at least in the current market, a long-term contract for electricity is assumed. Without that long-term contract, securing financing for a power project would be virtually impossible. Long-term contracts for natural gas, crude derivatives, and biomass feedstock are generally not available. Projects subject to markets for these commodities, therefore generally have to have higher margins to provide comfort to investors.

**SMRS are extremely safe**

**Kessides 2010** (Ioannis N. Kessides, Lead Economist in the World Bank's Development Research Group, June 2012, “The Future of the Nuclear Industry Reconsidered Risks, Uncertainties, and Continued Potential,” The World Bank Development Research Group Environment and Energy Team, http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2012/06/29/000158349\_20120629130837/Rendered/INDEX/WPS6112.txt)

Most SMR concepts envision widespread deployment of a large number of small nuclear plants sited in diverse environments and frequently in close proximity to users. These considerations place very stringent requirements on reliability and safety performance—arguably even more exacting relative to traditional large-scale nuclear plants. The need for enhanced levels of safety has led to design options that maximize the use of inherent and passive safety features and incorporate additional layers of defense in depth (IAEA, 2009).18 These safety features can be more easily and effectively implemented in SMRs because of their larger surface- to-volume ratio, reduced core power density, lower source term, and less frequent (multi-year) refueling. For example, large surface-to-volume ratios facilitate the passive (with no external source of electrical power or stored energy) removal of decay heat.¶ SMRs employ an enveloping design approach that seeks to eliminate or prevent as many accident initiators and accident consequences as possible. Any remaining plausible accident initiators and consequences are dealt with appropriate combinations of active and passive safety systems. In water-cooled SMRs, the integration of steam generators and pressurizers within the reactor vessel eliminates large-diameter pipes and penetrations in the reactor vessel, thereby reducing substantially the risk of LOCAs. Moreover, in some designs the application of in- vessel control rod drives eliminates the risk of inadvertent control rod ejections that lead to reactivity insertion accidents. Loss of coolant accidents may also be prevented with compact loop designs that employ short piping and fewer connections between components (Kuznetsov, 2009).¶ In HTGRs, the fuel particles consist of fissionable fuel kernels with tri-structural isotropic (TRISO) coating.19 The TRISO coating system constitutes a miniature pressure vessel that is capable of containing the readionuclides and gases generated by fission of the nuclear material in the kernel. One of the coating layers consists of silicon carbide (a strong refractory material) which can retain radionuclides at extremely high temperatures under all accident conditions—temperatures can remain at 1600°C for several hundred hours without loss of particle coating integrity. Furthermore, the graphite holding the TRISO-coated particles together can withstand even higher temperatures without structural damage.20 And the massive graphite structures in the core create an extremely large heat capacity. The combination of large thermal margins, low power density of the core, and relatively large length-to-diameter ratio of the core, allow for very slow and stable response to transients caused by initiating events and for passive heat removal (INL, 2011).¶ The effectiveness of passive safety features can be illustrated by comparing outcomes from probabilistic risk analysis (PRA). In 1991, a Level-2 PRA was developed for the EBR-II fast neutron spectrum experimental breeder reactor—a 21 MWe plant—to compare its operational risk to that of commercial LWR‘s for which PRA‘s were available. EBR-II employs an extensive array of passive and inherent safety measures to back up traditional active safety systems. This PRA exercise showed that for EBR-II the risk of simply violating a fuel pin technical specification (with no core damage) is less than the risk of significant core disruption for the LWRs of the time. The point of the PRA comparisons is that application of passive and inherent safety measures

/////

/////

as incorporated in SMRs can help to overcome the increase in numbers of SMRs needed to deliver the same societal energy provided by a smaller number of large-sized LWRs. Similarly, preliminary Level-1 PRA results for the NuScale Power Reactor indicate a total single-module mean CDF of 2.8x10-8/reactor-year, well below that of existing nuclear plants. And for the VK-300, the probability of severe core damage has been estimated to be less than 2.0x10-8/reactor-year (Hill et al, 1998; Kuznetsov and Gabaraev, 2007; Modarres, 2010).¶ SMRs have a smaller fuel inventory and thus a reduced source term. So on top of reduced hazard of core damage, the hazard attendant to release of radioactivity is also reduced per deployed SMR. The combination of reduced probability of core damage failure, a reduced source term, and additional fission product release barriers, could offer major advantages for emergency planning and response.

## \*\*\*2AC\*\*\*

### T-Substantial

#### We meet- Plan says substantial- This is a specification not t arg

#### Counter interp: Substantially means not minor

Words & Phrases: Permanent Edition, 2008, vol 40B, p.119

C.A.4 (Md.) 2006. The term "substantially" in the ADA means considerable or to a large degree; this definition precludes coverage of impairments whose effects on a major life activity rise only to the level of a mere difference with the abilities of an average individual. Americans with Disabilities Act of 1990, § 3(2)(A), 42 U.S.C.A. § 12102(2)( A).—Heiko v. Colombo Savings Bank, F.S.B., 434 F.3d 249, certiorari dismissed Colombo Say. Bank, F.S.B. v. Heiko, 127 S.Ct. 34, 165 L.Ed.2d 1013.—Civil R 1019(2).

Their interp is arbitrary- Limits out lots of affs for energies that have lots of subsidies now ie oil gas coal

Ours is key to aff flex- Neg side bias, block and generics- Only a few viable affs

Reasonability- Competing interps cause a race to the bottom

### REM

#### New mines solve

Cho 9/20 (Renee Cho, “Rare earth metals: Will we have enough?,” Phys Org, http://phys.org/news/2012-09-rare-earth-metals.html)

Kelemen is confident that ongoing global exploration for neodymium, for which there is no known substitute in low-weight magnets for electric motors and generators, will be successful and boost short-term supplies. On the other hand, the heavy rare earth metal dysprosium, used to increase the longevity of magnets in wind turbines and electric cars, is harder to find. "Ninety-nine percent of the current supply comes from clay deposits that can be easily mined with a shovel in Jiangxi, China," Kelemen said. "Other known deposits of dysprosium in Canada and Greenland will be much harder to mine." To ease the bottleneck of rare earth metals, mines being developed in Australia, Brazil, Canada and Vietnam could be in production within five years. The Molycorp mine in Mountain Pass has reopened and expects to be operating at full capacity this year.

### 2AC Bottleneck- Labor

#### Won’t impact SMR

Rosner 2011 (Robert Rosner, astrophysicist and founding director of the Energy Policy Institute at Chicago, and Stephen Goldberg, Special Assistant to the Director at the Argonne National Laboratory, Energy Policy Institute at Chicago, November 2011, “Small Modular Reactors: Key to Future Nuclear Power Generation in the U.S.,” online)

The economics for SMRs directly challenges two of the well-established pillars of large LWRs: the economies of scale and the economies of large nuclear fleet operations (i.e., large skilled workforce at each plant site). The SMR community postulates an alternative cost model based on the “economies of mass manufacturing.” The key aspect of this concept is that significant cost savings can be realized through more productive use of highly skilled craft labor in the manufacture of the SMR modules and portions of the nuclear island. The labor cost savings are achievable through fabrication of the modules in manufacturing plants combined with the potential to achieve significant productivity improvements through “learning by doing” in the manufacturing of a large number of reactor modules.

#### Plan solves it

Squassoni 2009 (Sharon Squassoni, senior associate in the Nonproliferation Program at the Carnegie Endowment and has been analyzing nonprolifera- tion, arms control, and national security issues for two decades, 2009, “Nuclear Energy: Rebirth or Resuscitation?,” Carnegie Endowment for International Peace, http://www.carnegieendowment.org/files/nuclear\_energy\_rebirth\_resuscitation.pdf)

According to a 2008 Bechtel estimate, if electricity demand grows in the United States 1.5 percent each year, and the energy mix remains the same, the United States would have to build 50 nuclear reactors, 261 coal-fired plants, 279 natural gas–fired plants, and 73 renewables projects by 2025 to keep up. All of these will require craft and con- struction labor. According to DOE, only a portion of the construction labor used to build fossil fuel–fired plants would have the skills necessary to build nuclear power plants.89¶ In addition to competing with other electricity projects, nuclear power construction competes with other large investment projects for labor and resources, particularly oil infrastructure. In the United States, rebuilding from Hurricane Katrina and big construction projects in Texas will continue to place pressure on construction labor forces. A Bechtel executive recently stated that the United States will face a skilled labor shortage of 5.3 million workers in 2010, which could rise to a shortage of 14 million by 2020. Adding to this is the retirement of baby boomers, and much slower growth in the number of college gradu- ates.90 Building a nuclear power plant in the United States requires 1,400 to 2,300 construction workers for four or more years. And the permanent labor force of a nuclear power plant numbers between 400 and 500.¶ On the front end of the fuel cycle—uranium exploration, mining, and milling—similar pressures are being felt, including a loss of indus- try knowledge, increased regulations and difficulties in mine develop- ment, greater risk for investors, and a shortage of skilled workers.91¶ It is likely that these supply issues could resolve themselves within a decade, with sufficient government policies to reverse some of the de- cline. U.S. nuclear firms have suggested a menu of options, including delays in taxing new domestic nuclear industry until national policy objectives for nuclear manufacturing are met; establishing a nuclear workforce program; and ensuring American access to other nuclear markets.92 The U.S., French, and British nuclear industries are engaged in several efforts to promote growth in the nuclear workforce. In the end, only a major expansion could help promote nuclear energy as a growth industry that would attract labor and give nuclear suppliers the confidence to expand. An expansion overseas, however, could siphon off some of these resources.

#### Key to deterrence

Browne 2008 (John C. Browne, Los Alamos National Laboratory, Clark Murdock, Center for Strategic and International Studies, Francis Slakey, American Physical Society, Benn Tannenbaum, American Association for the Advancement of Science, Jessica Yeats, Center for Strategic and International Studies, December 2008, Nuclear Weapons in 21st Century U.S. National Security, http://csis.org/files/media/csis/pubs/081208\_nuclear\_weapons\_report.pdf)

To maintain a credible nuclear deterrent, the United States should sustain the necessary human capital: as much of the existing workforce ages, experience, expertise and competence will likely decline across the nuclear enterprise including the Department of Defense (DOD), Department of Energy (DOE), and the military services. A broader mission for the nuclear weapons labs that addresses energy security as well as nuclear security interests can help recruit, retain, and sustain highly skilled and motivated scientists and engineers.

#### Miscalc nuke war

Caves 2010 (John P. Caves, Senior Research Fellow in the Center for the Study of Weapons of Mass Destruction at the National Defense University, January, Strategic Forum, No. 252, “Avoiding a Crisis of Confidence in the U.S. Nuclear Deterrent,” online)

Perceptions of a compromised U.S. nuclear deterrent as described above would have profound policy implications, particularly if they emerge at a time when a nuclear-armed great power is pursuing a more aggressive strategy toward U.S. allies and partners in its region in a bid to enhance its regional and global clout. A dangerous period of vulnerability would open for the United States and those nations that depend on U.S. protection while the United States attempted to rectify the problems with its nuclear forces. As it would take more than a decade for the United States to produce new nuclear weapons, ensuing events could preclude a return to anything like the status quo ante. The assertive, nuclear-armed great power, and other major adversaries, could be willing to challenge U.S. interests more directly in the expectation that the United States would be less prepared to threaten or deliver a military response that could lead to direct conflict. They will want to keep the United States from reclaiming its earlier power position. Allies and partners who have relied upon explicit or implicit assurances of U.S. nuclear protection as a foundation of their security could lose faith in those assurances. They could compensate by accommodating U.S. rivals, especially in the short term, or acquiring their own nuclear deterrents, which in most cases could be accomplished only over the mid- to long term. A more nuclear world would likely ensue over a period of years. Important U.S. interests could be compromised or abandoned, or a major war could occur as adversaries and/or the United States miscalculate new boundaries of deterrence and provocation. At worst, war could lead to state-on-state employment of weapons of mass destruction (WMD) on a scale far more catastrophic than what nuclear-armed terrorists alone could inflict.

### IAEA

IAEA overstretched and fails

Findlay 2012 (Trevor Findlay, Senior Fellow at Centre for International Governance Innovation and Director of the Canadian Centre for Treaty Compliance and Professor at the Norman Paterson School of International Affairs, “UNLEASHING THE NUCLEAR WATCHDOG: strengthening and reform of the IAEA”, http://www.cigionline.org/sites/default/files/IAEA\_final\_0.pdf)

In spite of this well-deserved reputation and its apparently starry prospects, the Agency remains relatively undernourished, its powers significantly hedged and its technical achievements often overshadowed by political controversy. This evidently prized body has, for instance, been largely unable to break free of the zero real growth (ZRG) budgeting imposed on all UN agencies from the mid-1980s onwards (ZRG means no growth beyond inflation). As a result, the Agency has not been provided with the latest technologies and adequate human resources. Moreover, despite considerable strengthening, its enhanced nuclear safeguards system is only partly mandatory. Notwithstanding the increasing influence of its recommended standards and guides, its safety and security powers remain entirely non-binding. Although the Agency’s long-term response to the Fukushima disaster remains to be seen, its role in nuclear safety and security continues to be hamstrung by states’ sensitivity about sovereignty and secrecy, and by its own lack of capacity. Many states have shown a surprising degree of ambiguity towards supporting the organization both politically and financially. The politicization of its governing bodies has increased alarmingly in recent years, crimping its potential.¶ Most alarming of all, the Agency has failed, by its own means, to detect serious non-compliance by Iraq, Iran and Libya with their safeguards agreements and, by extension, with the NPT (although it was the first to detect North Korea’s non-compliance). Iran’s non- compliance had gone undetected for over two decades. Most recently, the Agency missed Syria’s attempt to construct a nuclear reactor with North Korean assistance. Despite significant improvements to the nuclear safeguards regime, there is substantial room for improvement, especially in detecting undeclared materials, facilities and activities.

### Terror

#### The War on Terrorism is not constructed, nor can it be deterred. Our criticisms of the government won’t deter those who are ready to strike us.

Jean Bethke **Elshtain and** Laura- Rockefeller **Spelman** (Professor of Social and Political Ethics, University of Chicago Divinity School) **2003** “Just War Against Terrorism”

Certain critical events in the past remind us of this mordant fact. Looking back on twentieth-century fascism, we do not wring our hands and blame everyone but the Nazis for their murderous policies. Of course, it is important for historians and political analysts to take account of the political, social, and economic milieu out of which National Socialism emerged. But the difficulty and desperation of post— World War I conditions—runaway inflation, a war-torn economy, and war reparations, all of which Germany faced—do not add up to the inevitability of the evil that was Nazism. To claim such is to set in motion an exculpatory strategy that, whether intentionally or inadvertently, rationalizes political pathology. The overriding truth and most salient fact of National Socialism is simply stated: A group of people took over state power, aimed to expand an Aryan Empire through ruthless force, and, as dictated by their ideology of biological racism, murdered whole categories of people not because of anything they had done but because of who they were. Why, then, in the context of America's war against terrorism, do so many tick off a list of American "failures" or even insist that America brought the horrors of September 11, 2001, on herself? Let me be clear that I exempt from this mode of argument the ludicrous claims that have arisen since that day, such as the slander that Israel carried out the attacks after having first warned Jews who worked in New York's World Trade Center towers to stay home that day, or the preposterous charge that American officials, up to and including the president of the United States, engineered the attacks to bolster their popularity. This sort of in- lammatory madness exists outside the boundary of political debate and festers instead in the fever swamps of conspiracy theory. Conducted within the boundary of reasonable political debate, however, are those arguments that an international "war on poverty and despair," or a change in the direction of U.S. Middle Eastern policy, or a different U.S. policy toward Iraq will stay the hands of murderous terrorists in the future. Certainly these arguments deserve a hearing. Pushing more programs that deal with poverty and despair or rethinking American foreign policy, including our approach to Iraq, may have desirable outcomes. But no such change, either singly or together, will deter Osama bin Laden and those like him. To believe such is to plunge headfirst into the strategy of denial characteristic of the citizens of Oran in Camus's novel. We could do everything demanded of us by those who are critical of America, both inside and outside our boundaries, but Islamist fundamentalism and the threat it poses would not be deterred.

### 2AC Fiscal Cliff- Link Turn

#### No deal- ideological lines in the sand

Zurko 11/9 (Roz Zurko, Wall Street reacts to Obama and Boehner's 'lines in the sand', Examiner, http://www.examiner.com/article/wall-street-reacts-to-obama-and-boehner-s-lines-the-sand)

Boehner called on Obama to lead the efforts to avoid the fiscal cliff, but took the same stand against increasing the taxes for the wealthy. Obama later invited the congressional leaders to the White House to start in the negotiations in a deal to avoid the fiscal cliff. He remained adamant on his stand for wanting higher taxes for the wealthy. So there you have it, it doesn’t look as if a thing has changed. This also seems to be the mindset of Wall Street, nothing has changed and not a hint of a rescue is seen for the dreaded fiscal cliff.¶ Mohannad Aama, managing director of Beam Capitol Management LLC in New York said,¶ "Investors were disappointed. There was anticipation that there may be more willingness to compromise, but just like Boehner did earlier in the day, both camps stuck to their lines in the sand, so to speak."

#### Obama’s PC is failing

KOSU News 11/9 (“Deja Vu All Over Again: Obama And Boehner Clash On Fiscal Cliff And Taxes,” http://kosu.org/2012/11/deja-vu-all-over-again-obama-and-boehner-clash-on-fiscal-cliff-and-taxes/)

If you fell asleep Rip Van Winkle-like earlier in the year only to wake up Friday, you might be forgiven for thinking no time had passed.

Because on Friday, President Obama called for higher taxes on the wealthy to be part of any agreement to avoid the fiscal cliff, while House Speaker John Boehner strongly indicated that proposal was a non-starter with House Republicans.¶ But, of course, we just had an election in which the president won a second term and, through that, some political capital. Exactly how much remains to be seen.¶ So with the president’s big — and, to many Republicans, unexpected — win Tuesday in the Electoral College behind him, Obama made an offer he’s counting on Boehner finding hard to refuse in the coming, tense negotiations over a deficit-cutting deal.¶ The president proposed that Republicans should immediately agree to extend the middle-class tax cuts scheduled to expire at the end of the year while discussions continue on a more comprehensive agreement to avert the spending cuts and tax increases due to take effect in the new year, the so-called fiscal cliff, which experts warn could return the U.S. economy to recession.¶ At a White House event that featured a diverse group of people standing on risers behind him, which gave the appearance that for the White House, Tuesday was just a pause in the presidential campaign, Obama said:¶ “So let’s not wait. Even as we’re negotiating a broader deficit reduction package, let’s extend the middle-class tax cuts right now. Let’s do that right now.¶ “That one step, that one step would give millions of families, 98 percent of Americans and 97 percent of small businesses, the certainty that they need going into the new year. It would immediately take a huge chunk of the economic uncertainty off the table. And that will lead to new jobs and faster growth. Business will know that consumers, they’re not going to see a big tax increase. They’ll know that most small businesses won’t see this increase. And so a lot of uncertainty that you’re reading about, that will be removed.”¶ Not only did Obama have Tuesday’s Electoral College and popular vote on his side, he also had exit polling. Sixty percent of voters surveyed said they thought taxes should be increased on either all taxpayers or those with more than $250,000 in annual income.¶ Even a significant minority of voters who backed Republican Mitt Romney — 29 percent — agreed that taxes should be raised on those with income over $250,000.¶ Because Romney made opposition to raising tax rates on the superwealthy part of his campaign, Obama seemed to interpret his defeat of his GOP challenger as a referendum on this point:¶ “And I just want to point out, this was a central question during the election. It was debated over and over again. And on Tuesday night, we found out that the majority of Americans agree with my approach. And that includes Democrats, independents and a lot of Republicans across the country, as well as independent economists and budget experts.”¶ Obama was clearly trying to pressure Republicans by putting on the table an extension of the middle-class tax cuts that were part of tax-reduction packages enacted by his predecessor, George W. Bush.¶ By calling for an immediate extension of the middle-class tax cuts, Obama was attempting to paint congressional Republicans into a corner. While he didn’t say it, the implication was clear: If taxes go up next year on millions of middle-income earners, Obama will blame Republican resistance to raising tax rates on the wealthy as the cause.¶ The president’s proposal was reminiscent of earlier tactical moves in his presidency. When Bush-era tax cuts were due to expire at the end of 2010, for instance, the president linked an extension of those cuts to a renewal of long-term unemployment insurance.¶ Republicans initially balked, but a deal was reached as the deadline approached that extended the jobless benefits. The tax cuts were extended as well for two years, including cuts for the wealthiest taxpayers.¶ If Republican leaders on Capitol Hill were feeling any pressure from the president’s gambit, it wasn’t readily apparent.¶ On election night, Boehner offered this interpretation of the election returns while speaking at the Republican National Committee:¶ “The American people want solutions — and tonight, they’ve responded by renewing our House Republican majority. With this vote, the American people have also made clear that there is no mandate for raising tax rates.”¶ On Friday, after the president cited legislation he supports and that the Democratic-controlled Senate passed that would raise rates on those with the highest income, Boehner said:¶ “The increased tax rates that would be allowed under the Senate-passed bill are part of the fiscal cliff that economists are warning us to avoid. Those increased tax rates will destroy jobs in America by hurting small businesses across the country. Republicans are eager to get to work on an agreement that averts the entire fiscal cliff.”¶ While the words from Obama and Boehner on Friday could be properly viewed as the two men staking out opening positions in the coming negotiations over solving the fiscal cliff, they also could be seen as addressing the two very different constituencies the men must answer to.¶ Obama won re-election largely because of support from a coalition of more progressive supporters in urban and suburban areas, many of them minorities and women, who came out for him on Tuesday and during early voting in the weeks before.¶ Boehner, meanwhile, retained his House majority largely because of strong support in congressional districts with primarily white voters in conservative suburban and rural areas.

#### No military capacity – internal capacity to de-escalate overwhelms your links

Steven A. Cook (fellow at the Council on Foreign Relations) Ray Takeyh (fellows at the Council on Foreign Relations) and Suzanne Maloney (senior fellow at Saban Center) June 28 2007 “Why the Iraq war won't engulf the Mideast”, International Herald Tribune

Yet, the Saudis, Iranians, Jordanians, Syrians, and others are very unlikely to go to war either to protect their own sect or ethnic group or to prevent one country from gaining the upper hand in Iraq. The reasons are fairly straightforward. First, Middle Eastern leaders, like politicians everywhere, are primarily interested in one thing: self-preservation. Committing forces to Iraq is an inherently risky proposition, which, if the conflict went badly, could threaten domestic political stability. Moreover, most Arab armies are geared toward regime protection rather than projecting power and thus have little capability for sending troops to Iraq. Second, there is cause for concern about the so-called blowback scenario in which jihadis returning from Iraq destabilize their home countries, plunging the region into conflict. Middle Eastern leaders are preparing for this possibility. Unlike in the 1990s, when Arab fighters in the Afghan jihad against the Soviet Union returned to Algeria, Egypt and Saudi Arabia and became a source of instability, Arab security services are being vigilant about who is coming in and going from their countries. In the last month, the Saudi government has arrested approximately 200 people suspected of ties with militants. Riyadh is also building a 700 kilometer wall along part of its frontier with Iraq in order to keep militants out of the kingdom. Finally, there is no precedent for Arab leaders to commit forces to conflicts in which they are not directly involved. The Iraqis and the Saudis did send small contingents to fight the Israelis in 1948 and 1967, but they were either ineffective or never made it. In the 1970s and 1980s, Arab countries other than Syria, which had a compelling interest in establishing its hegemony over Lebanon, never committed forces either to protect the Lebanese from the Israelis or from other Lebanese. The civil war in Lebanon was regarded as someone else’s fight. Indeed, this is the way many leaders view the current situation in Iraq. To Cairo, Amman and Riyadh, the situation in Iraq is worrisome, but in the end it is an Iraqi and American fight. As far as Iranian mullahs are concerned, they have long preferred to press their interests through proxies as opposed to direct engagement. At a time when Tehran has access and influence over powerful Shiite militias, a massive cross-border incursion is both unlikely and unnecessary. So Iraqis will remain locked in a sectarian and ethnic struggle that outside powers may abet, but will remain within the borders of Iraq. The Middle East is a region both prone and accustomed to civil wars. But given its experience with ambiguous conflicts, the region has also developed an intuitive ability to contain its civil strife and prevent local conflicts from enveloping the entire Middle East.

#### No impact to fiscal cliff

Gradual slope

Policy mitigation

Reversibility

Stone 2012 (Chad Stone, PhD in Economics from Yale, Chief Economist at the Center on Budget and Policy Priorities where he specializes in the economic analysis of budget and policy issues, acting executive director of the Joint Economic Committee of the Congress in 2007 and before that staff director and chief economist for the Democratic staff of the committee from 2002 to 2006, chief economist for the Senate Budget Committee in 2001-02 and a senior economist and then chief economist at the President’s Council of Economic Advisers from 1996 to 2001, senior researcher at the Urban Institute and taught for several years at Swarthmore College, October 10, 2012, “It’s a Slope, Not a Cliff,” Center on Budget and Policy Priorities, http://www.offthechartsblog.org/its-a-slope-not-a-cliff/)

Will the bell toll on the economic recovery at midnight December 31st if policymakers allow the tax and spending changes required under current law to kick in — that is, if we go over the so-called “fiscal cliff”? We’ve said no, and a new analysis by Goldman Sachs (GS) economists Alec Phillips and Jan Hatzius reaches broadly similar conclusions.¶ Policymakers still would have some time in early 2013 to work out a responsible long-term budget deal that reduces deficits in a way that does not wreck the recovery.¶ If the scheduled tax and spending changes take effect, the economy will start down a slope that would likely be relatively modest at first, but then much steeper if 2013 unfolds without a budget deal. Thus, if policymakers strike a deal before the economy has gone very far down that slope, any harm to the recovery is likely to be much smaller than if there is no agreement and all the “fiscal cliff” measures stay in effect.¶ Here’s how GS sees it:¶ It is likely that if Congress were to fail to address this issue before the end of the year [2012], lawmakers would return in January and reach an agreement fairly quickly. The debt limit, which Congress must raise no later than early March according to our projections, might serve as a deadline for action on the fiscal cliff if public pressure hasn’t already forced an agreement. If, for example, an agreement were reached in January, we assume it would reinstate most policies retroactively, meaning that much of the effect would be reversed before the end of the quarter, reducing the overall economic effect.¶ Both sides of the political aisle have proposed extending President Bush’s “middle-class” tax cuts for another year. The sticking point is the upper-income Bush tax cuts. GS argues that it might be easier to reach agreement once all the tax cuts have expired, “since lawmakers could claim that setting tax rates and/or revenue levels higher than 2012 would nevertheless constitute a ‘tax cut’ compared with the policies that would be in effect in January 2013.”¶ GS goes on to argue that if policymakers appear likely to extend at least some of the tax cuts retroactively, the Treasury Department might have the flexibility to maintain tax withholding at 2012 levels for a while, which “would cushion the effect of a short lapse.”¶ Similarly, GS observes, government agencies might be able to phase in the automatic spending cuts (the “sequester”) that the Budget Control Act requires in 2013 if a budget deal appeared likely.¶ The fact that the economy will start down a slope in January, not plunge over a cliff, gives policymakers an opportunity to craft a responsible budget agreement in January or February if they can’t do it before then. If they seize that opportunity, the economy will be little the worse for wear as a result of the delay — and the budget outlook may be greatly improved.

#### No war

Thomas P.M. Barnett (senior managing director of Enterra Solutions LLC and a contributing editor/online columnist for Esquire magazine) August 2009 “The New Rules: Security Remains Stable Amid Financial Crisis” http://www.aprodex.com/the-new-rules--security-remains-stable-amid-financial-crisis-398-bl.aspx

When the global financial crisis struck roughly a year ago, the blogosphere was ablaze with all sorts of scary predictions of, and commentary regarding, ensuing conflict and wars -- a rerun of the Great Depression leading to world war, as it were. Now, as global economic news brightens and recovery -- surprisingly led by China and emerging markets -- is the talk of the day, it's interesting to look back over the past year and realize how globalization's first truly worldwide recession has had virtually no impact whatsoever on the international security landscape. None of the more than three-dozen ongoing conflicts listed by GlobalSecurity.org can be clearly attributed to the global recession. Indeed, the last new entry (civil conflict between Hamas and Fatah in the Palestine) predates the economic crisis by a year, and three quarters of the chronic struggles began in the last century. Ditto for the 15 low-intensity conflicts listed by Wikipedia (where the latest entry is the Mexican "drug war" begun in 2006). Certainly, the Russia-Georgia conflict last August was specifically timed, but by most accounts the opening ceremony of the Beijing Olympics was the most important external trigger (followed by the U.S. presidential campaign) for that sudden spike in an almost two-decade long struggle between Georgia and its two breakaway regions. Looking over the various databases, then, we see a most familiar picture: the usual mix of civil conflicts, insurgencies, and liberation-themed terrorist movements. Besides the recent Russia-Georgia dust-up, the only two potential state-on-state wars (North v. South Korea, Israel v. Iran) are both tied to one side acquiring a nuclear weapon capacity -- a process wholly unrelated to global economic trends. And with the United States effectively tied down by its two ongoing major interventions (Iraq and Afghanistan-bleeding-into-Pakistan), our involvement elsewhere around the planet has been quite modest, both leading up to and following the onset of the economic crisis: e.g., the usual counter-drug efforts in Latin America, the usual military exercises with allies across Asia, mixing it up with pirates off Somalia's coast). Everywhere else we find serious instability we pretty much let it burn, occasionally pressing the Chinese -- unsuccessfully -- to do something. Our new Africa Command, for example, hasn't led us to anything beyond advising and training local forces. So, to sum up: \* No significant uptick in mass violence or unrest (remember the smattering of urban riots last year in places like Greece, Moldova and Latvia?); \* The usual frequency maintained in civil conflicts (in all the usual places); \* Not a single state-on-state war directly caused (and no great-power-on-great-power crises even triggered); \* No great improvement or disruption in great-power cooperation regarding the emergence of new nuclear powers (despite all that diplomacy); \* A modest scaling back of international policing efforts by the system's acknowledged Leviathan power (inevitable given the strain); and \* No serious efforts by any rising great power to challenge that Leviathan or supplant its role. (The worst things we can cite are Moscow's occasional deployments of strategic assets to the Western hemisphere and its weak efforts to outbid the United States on basing rights in Kyrgyzstan; but the best include China and India stepping up their aid and investments in Afghanistan and Iraq.) Sure, we've finally seen global defense spending surpass the previous world record set in the late 1980s, but even that's likely to wane given the stress on public budgets created by all this unprecedented "stimulus" spending. If anything, the friendly cooperation on such stimulus packaging was the most notable great-power dynamic caused by the crisis. Can we say that the world has suffered a distinct shift to political radicalism as a result of the economic crisis? Indeed, no. The world's major economies remain governed by center-left or center-right political factions that remain decidedly friendly to both markets and trade. In the short run, there were attempts across the board to insulate economies from immediate damage (in effect, as much protectionism as allowed under current trade rules), but there was no great slide into "trade wars." Instead, the World Trade Organization is functioning as it was designed to function, and regional efforts toward free-trade agreements have not slowed. Can we say Islamic radicalism was inflamed by the economic crisis? If it was, that shift was clearly overwhelmed by the Islamic world's growing disenchantment with the brutality displayed by violent extremist groups such as al-Qaida. And looking forward, austere economic times are just as likely to breed connecting evangelicalism as disconnecting fundamentalism. At the end of the day, the economic crisis did not prove to be sufficiently frightening to provoke major economies into establishing global regulatory schemes, even as it has sparked a spirited -- and much needed, as I argued last week -- discussion of the continuing viability of the U.S. dollar as the world's primary reserve currency. Naturally, plenty of experts and pundits have attached great significance to this debate, seeing in it the beginning of "economic warfare" and the like between "fading" America and "rising" China. And yet, in a world of globally integrated production chains and interconnected financial markets, such "diverging interests" hardly constitute signposts for wars up ahead. Frankly, I don't welcome a world in which America's fiscal profligacy goes undisciplined, so bring it on -- please! Add it all up and it's fair to say that this global financial crisis has proven the great resilience of America's post-World War II international liberal trade order. Do I expect to read any analyses along those lines in the blogosphere any time soon? Absolutely not. I expect the fantastic fear-mongering to proceed apace. That's what the Internet is for.

#### Political capital theory is bankrupt

Dickinson2009 (Matthew Dickinson, professor of political science at Middlebury College and taught at Harvard University, where he also received his Ph.D., “Sotomayor, Obama and Presidential Power” May, google)

What is of more interest to me, however, is what her selection reveals about the basis of presidential power. Political scientists, like baseball writers evaluating hitters, have devised numerous means of measuring a president’s influence in Congress. I will devote a separate post to discussing these, but in brief, they often center on the creation of legislative “box scores” designed to measure how many times a president’s preferred piece of legislation, or nominee to the executive branch or the courts, is approved by Congress. That is, how many pieces of legislation that the president supports actually pass Congress? How often do members of Congress vote with the president’s preferences? How often is a president’s policy position supported by roll call outcomes? These measures, however, are a misleading gauge of presidential power – they are a better indicator of congressional power. This is because how members of Congress vote on a nominee or legislative item is rarely influenced by anything a president does. Although journalists (and political scientists) often focus on the legislative “endgame” to gauge presidential influence – will the President swing enough votes to get his preferred legislation enacted? – this mistakes an outcome with actual evidence of presidential influence. Once we control for other factors – a member of Congress’ ideological and partisan leanings, the political leanings of her constituency, whether she’s up for reelection or not – we can usually predict how she will vote without needing to know much of anything about what the president wants. (I am ignoring the importance of a president’s veto power for the moment.) Despite the much publicized and celebrated instances of presidential arm-twisting during the legislative endgame, then, most legislative outcomes don’t depend on presidential lobbying. But this is not to say that presidents lack influence. Instead, the primary means by which presidents influence what Congress does is through their ability to determine the alternatives from which Congress must choose. That is, presidential power is largely an exercise in agenda-setting – not arm-twisting. And we see this in the Sotomayer nomination. Barring a major scandal, she will almost certainly be confirmed to the Supreme Court whether Obama spends the confirmation hearings calling every Senator or instead spends the next few weeks ignoring the Senate debate in order to play Halo III on his Xbox. That is, how senators decide to vote on Sotomayor will have almost nothing to do with Obama’s lobbying from here on in (or lack thereof). His real influence has already occurred, in the decision to present Sotomayor as his nominee.

#### Here are 17 thumpers

Wasson 11/7 (Erick Wasson, “25 problems facing Obama, Congress,” The Hill, http://thehill.com/blogs/on-the-money/budget/266667-25-problems-now-facing-obama-congress)

A slew of thorny issues awaits President Obama and Congress in the lame-duck session, ranging from taxes to defense to Medicare. ¶ Obama’s victory increases the chances that the lame duck will be productive, but it remains to be seen if the president and leaders on Capitol Hill can break the gridlock that has gripped the 112th Congress. ¶ The following are 25 policy matters most likely to be addressed in the coming weeks. ¶ Expiring Bush-era tax rates¶ House Speaker John Boehner (R-Ohio) quickly sought to define the terms of this debate, saying on election night that Obama’s victory is not a mandate to raise taxes. But Obama clearly has leverage, especially because the 2001 and 2003 tax reductions expire at the end of the year. Obama has vowed not to renew the tax reduction for families making more than $250,000 a year; the GOP wants all the reductions extended. Despite the rhetoric, a compromise at a $1 million threshold could be reached. Another possibility is extending the Bush rates temporarily in exchange for future tax revenue increases as a part of tax reform. ¶ Sequester¶ Under the terms of the August 2011 debt-ceiling deal, $109 billion in across-the-board spending cuts is set to hit in January. Defense would take a $55 billion hit. Congress will look to replace at least this first slice of $1 trillion in 10-year cuts with targeted cuts to mandatory spending and possibly tax increases. A “grand bargain” replacing all the cuts and tax increases in the fiscal cliff is probably not entirely feasible in the lame duck, but a framework for future action in 2013 could materialize. ¶ Hurricane Sandy supplemental spending bill¶ The damage from Sandy will still be big news when Congress returns next week. Forty-four members of the House signed a bipartisan letter urging leaders to be prepared to increase the federal disaster relief fund’s $7.1 billion budget. ¶ Alternative Minimum Tax patch¶ Unless Congress acts, millions of middle-class earners will come under the umbrella of the AMT for the current tax year. Indexing the AMT exemption for inflation retroactively would be a nightmare, so some form of AMT patch is highly likely in the lame-duck session.¶ Capital gains tax rate¶ After Dec. 31, the tax rate on investments held for more than one year will rise for middle-income and higher-income earners, from 15 percent to 20. Obama wants to preserve the rise for higher-income earners. Some Republicans want the rate dropped to zero to spur investment.¶ Medicare doc fix¶ Unless Congress acts, Medicare payments to doctors will be slashed by 27 percent in January. ¶ Omnibus appropriations bill¶ The six-month continuing resolution put the government on autopilot until March. If replacing the sequester involves discretionary cuts, there would be momentum to replace the continuing resolution with 12 detailed bills.¶ Postal reform¶ The beleaguered U.S. Postal Service this fall defaulted on $11 billion in retiree healthcare payments. The Senate and House have different approaches to revamping the USPS. ¶ Payroll tax cut extension¶ House Democrats, led by Budget Committee ranking member Chris Van Hollen (Md.), have suggested continuing the 2-percentage-point reduction in the payroll tax that was extended in February. Some liberals are suggesting that reviving the 2009 stimulus’s Making Work Pay tax credit is a better idea. ¶ Unemployment insurance extension¶ Under an agreement forged in February, extended federal benefits have been gradually curtailed and are set to expire for the long-term unemployed at year’s end. Expect the battle to, once again, be contentious, with some lawmakers reluctant to spend federal dollars despite a national employment rate that recently rose to 7.9 percent. ¶ Tax extenders¶ A package dealing with most of 73 targeted tax credits has passed the Senate Finance Committee. The $205 billion bill would patch the AMT and contains items like the research and development tax credit and a production tax credit for wind projects. ¶ Infrastructure bank¶ Sandy has exposed weaknesses in transportation and water infrastructure and could boost plans to fix crumbling roads, bridges, ports and tunnels. Obama incorporated a bipartisan proposal to create a national infrastructure bank in his stalled 2011 Jobs Act. It would take $10 billion in government seed money to identify worthy projects and seek out private financing to supplement government loan guarantees. ¶ Defense authorization¶ A defense authorization bill has passed for each of the last 50 years, and the Senate is unlikely to break that streak in the lame duck. The main issues have been Senate floor time and Majority Leader Harry Reid’s (D-Nev.) desire to avoid giving the GOP a chance to blame Obama for sequestration. The Senate Armed Services Committee passed a $631.4 billion bill with $4 billion less in funding than the House-passed bill. The House measure seeks to ban gay marriage on military bases. ¶ Farm bill¶ The Senate has passed a bill, but House GOP leaders have refused to act on a pending plan in the lower chamber. Liberals are opposed to food-stamp cuts in both bills, while conservatives want deeper cuts. The farm bill could get wrapped into a fiscal cliff deal replacing the sequester. ¶ Airline emissions¶ The European Union has enacted a climate-change plan whereby airlines servicing the continent will have to buy carbon credits. The Senate on Sept. 22 passed a bill aimed at shielding U.S. airlines from paying greenhouse-gas penalties. The House passed a similar version of the bill in 2011 and might be amenable to passing the Senate version. ¶ Online poker¶ Reid wants action in the lame duck on a bill legalizing online poker and online lottery sales. Companion legislation has been introduced in the House by Rep. Joe Barton (R-Texas). ¶ Foreign Intelligence Surveillance Act¶ The Senate might consider the controversial FISA amendments bill in the lame duck. The legislation would reauthorize spying on foreign communications without a judicial warrant. The House has approved a five-year extension of the authority, which expires in January. ¶ Violence Against Women Act¶ VAWA became a major campaign-season talking point for Democrats, who claimed the GOP was waging a “war on women.” The House and Senate have passed different VAWA legislation, which seeks to extend funding to investigate and prosecute domestic violence. ¶ Permanent Normal Trade Relations (PNTR) for Russia¶ Russia joined the World Trade Organization (WTO) this summer with the backing of the United States. At this point, U.S. exporters cannot enjoy the lower tariffs Russia is granting other WTO members because the U.S. has not permanently removed longstanding conditions on trade with Russia stemming from the Soviet era. PNTR is heavily supported by the business community.¶ Benefits for same-sex partners of federal workers¶ Retiring Sen. Joe Lieberman (I-Conn.) has pushed a bill that would provide retirement and health benefits to same-sex domestic partners of federal workers. Sen.-elect Tammy Baldwin (D-Wis.) sponsored the House version. ¶ Online sales tax¶ Retail groups have been pushing hard for an online sales tax measure they say will level the playing field between brick-and-mortar stores and online retailers. Similar, but not identical, bipartisan measures in both the House and Senate would allow states to collect from out-of-state retailers. Some conservatives, such as Sen. Jim DeMint (R-S.C.), oppose it.¶ Cybersecurity¶ Senate Republicans blocked the Cybersecurity Act of 2012, sponsored by Sens. Lieberman and Susan Collins (R-Maine), in September, and a compromise has been elusive, given business opposition.¶ China currency¶ China currency played a big role in the presidential campaign, with Mitt Romney vowing to name China a currency manipulator on day one of his administration. The Senate passed a bill 63-35 last year hitting China with tariffs, but it has not been taken up by House GOP leaders. ¶ Mortgage Forgiveness Debt Relief extension¶ Under permanent tax law, mortgage debt that is forgiven by a bank, either through a principal reduction or a short sale, is taxed as income. But the Mortgage Forgiveness Debt Relief Act, passed in 2007 in an effort to boost the ailing housing market, allowed taxpayers to exempt that forgiveness from their tax bill. Now the law is set to expire, and industry groups and housing advocates are pushing to get it extended as part of any broad legislative package. ¶ Consumer Financial Protection Bureau fix¶ Obama’s win means that repealing Dodd-Frank is off the table. But the financial industry and both parties want to tweak part of the Wall Street reform law, which created the CFPB, that contains a technical oversight that could endanger vital information handed to the new regulator.

#### Plan popular- Nuke lobby

Samuelsohn 2011 (Darren Samuelsohn, March 16, 2011, “Nuclear industry lobbyists' clout felt on Hill,” Politico, http://www.politico.com/news/stories/0311/51367.html)

Facing its biggest crisis in 25 years, the U.S. nuclear power industry can count on plenty of Democratic and Republican friends in both high and low places.¶ During the past election cycle alone, the Nuclear Energy Institute and more than a dozen companies with big nuclear portfolios have spent tens of millions of dollars on lobbying and campaign contributions to lawmakers in key leadership slots and across influential state delegations.¶ The donations and lobbying funds came at a critical moment for the nuclear industry as its largest trade group and major companies pushed for passage of a cap-and-trade bill.¶ While that effort failed, the money is sure to keep doors open on Capitol Hill as lawmakers consider any response to the safety issues highlighted by multiple nuclear reactor meltdowns in Japan in the aftermath of last week’s monster earthquake and tsunami.¶ “The bottom line is you’ve got a variety of industrial interests that care about nuclear power and have a heck of a lot of money to spend if their business and their bottom line is put in political jeopardy,” said Dave Levinthal, communications director at the Center for Responsive Politics. “As Congress is talking about potentially diving deeper, these companies bring a lot of resources and a heck of a lot of cash to bear if tDhis fight goes forward.”¶ NEI, the industry’s biggest voice in Washington, for example, spent $3.76 million to lobby the federal government and an additional $323,000 through its political action committee on a bipartisan congressional slate, including 134 House and 30 Senate candidates, according to data compiled by the CRP.¶ Alex Flint, NEI’s senior vice president for government affairs, said the spending is a byproduct of record high demand for his industry.¶ “The fact that the day after the election, both the president and [House Speaker John Boehner] said nuclear was an area where it’s something they can agree, it’s made us that much more in demand,” Flint said. “Our lobbying expenses have gone up more in large part because we have more people talking to more members of Congress.”

**DOD means no link**

Davenport 2012 (Coral Davenport, February 10, 2012, “White House Budget to Expand Clean-Energy Programs Through Pentagon,” National Journal, http://www.nationaljournal.com/2013-budget/white-house-budget-to-expand-clean-energy-programs-through-pentagon-20120210)

The White House believes it has figured out how to get more money for clean-energy programs touted by President Obama without having it become political roadkill in the wake of the Solyndra controversy: Put it in the Pentagon. While details are thin on the ground, lawmakers who work on both energy- and defense-spending policy believe the fiscal 2013 budget request to be delivered to Congress on Monday probably won’t include big increases for wind and solar power through the Energy Department, a major target for Republicans since solar-panel maker Solyndra defaulted last year on a $535 million loan guarantee.¶ But they do expect to see increases in spending on alternative energy in the Defense Department, such as programs to replace traditional jet fuel with biofuels, supply troops on the front lines with solar-powered electronic equipment, build hybrid-engine tanks and aircraft carriers, and increase renewable-energy use on military bases.¶ While Republicans will instantly shoot down requests for fresh spending on Energy Department programs that could be likened to the one that funded Solyndra, many support alternative-energy programs for the military.¶ “I do expect to see the spending,” said Rep. Jack Kingston, R-Ga., a member of the House Defense Appropriations Subcommittee, when asked about increased investment in alternative-energy programs at the Pentagon. “I think in the past three to five years this has been going on, but that it has grown as a culture and a practice – and it’s a good thing.”¶ “If Israel attacks Iran, and we have to go to war – and the Straits of Hormuz are closed for a week or a month and the price of fuel is going to be high,” Kingston said, “the question is, in the military, what do you replace it with? It’s not something you just do for the ozone. It’s strategic.”¶ Sen. Lindsey Graham, R-S.C., who sits on both the Senate Armed Services Committee and the Defense Appropriations Subcommittee, said, “I don’t see what they’re doing in DOD as being Solyndra.” ¶ “We’re not talking about putting $500 million into a goofy idea,” Graham told National Journal. “We’re talking about taking applications of technologies that work and expanding them. I wouldn’t be for DOD having a bunch of money to play around with renewable technologies that have no hope. But from what I understand, there are renewables out there that already work.”¶ A senior House Democrat noted that this wouldn’t be the first time that the Pentagon has been utilized to advance policies that wouldn’t otherwise be supported.¶ “They did it in the ’90s with medical research,” said Rep. Henry Waxman, D-Calif., ranking member of the House Energy and Commerce Committee.¶ In 1993, when funding was frozen for breast-cancer research programs in the National Institutes of Health, Congress boosted the Pentagon’s budget for breast-cancer research – to more than double that of the health agency’s funding in that area.¶ Politically, the strategy makes sense. Republicans are ready to fire at the first sign of any pet Obama program, and renewable programs at the Energy Department are an exceptionally ripe target. That’s because of Solyndra, but also because, in the last two years, the Energy Department received a massive $40 billion infusion in funding for clean-energy programs from the stimulus law, a signature Obama policy. When that money runs out this year, a request for more on top of it would be met with flat-out derision from most congressional Republicans.¶ Increasing renewable-energy initiatives at the Pentagon can also help Obama advance his broader, national goals for transitioning the U.S. economy from fossil fuels to alternative sources. As the largest industrial consumer of energy in the world, the U.S. military can have a significant impact on energy markets – if it demands significant amounts of energy from alternative sources, it could help scale up production and ramp down prices for clean energy on the commercial market.¶ Obama acknowledged those impacts in a speech last month at the Buckley Air Force Base in Colorado. “The Navy is going to purchase enough clean-energy capacity to power a quarter of a million homes a year. And it won’t cost taxpayers a dime,” Obama said.¶ “What does it mean? It means that the world’s largest consumer of energy – the Department of Defense – is making one of the largest commitments to clean energy in history,” the president added. “That will grow this market, it will strengthen our energy security.”¶ Experts also hope that Pentagon engagement in clean-energy technology could help yield breakthroughs with commercial applications.¶ Kingston acknowledged that the upfront costs for alternative fuels are higher than for conventional oil and gasoline. For example, the Air Force has pursued contracts to purchase biofuels made from algae and camelina, a grass-like plant, but those fuels can cost up to $150 a barrel, compared to oil, which is lately going for around $100 a barrel. Fuel-efficient hybrid tanks can cost $1 million more than conventional tanks – although in the long run they can help lessen the military’s oil dependence, Kingston said Republicans recognize that the up-front cost can yield a payoff later. “It wouldn’t be dead on arrival. But we’d need to see a two- to three-year payoff on the investment,” Kingston said.¶ Military officials – particularly Navy Secretary Ray Mabus, who has made alternative energy a cornerstone of his tenure – have been telling Congress for years that the military’s dependence on fossil fuels puts the troops – and the nation’s security – at risk.¶ Mabus has focused on meeting an ambitious mandate from a 2007 law to supply 25 percent of the military’s electricity from renewable power sources by 2025. (Obama has tried and failed to pass a similar national mandate.)¶ Last June, the DOD rolled out its first department-wide energy policy to coalesce alternative and energy-efficient initiatives across the military services. In January, the department announced that a study of military installations in the western United States found four California desert bases suitable to produce enough solar energy – 7,000 megawatts – to match seven nuclear power plants.¶ And so far, those moves have met with approval from congressional Republicans.¶ Even so, any request for new Pentagon spending will be met with greater scrutiny this year. The Pentagon’s budget is already under a microscope, due to $500 billion in automatic cuts to defense spending slated to take effect in 2013.¶ But even with those challenges, clean-energy spending probably **won’t stand out as much** in the military budget as it would in the Energy Department budget. Despite its name, the Energy Department has traditionally had little to do with energy policy – its chief portfolio is maintaining the nation’s nuclear weapons arsenal. Without the stimulus money, last year only $1.9 billion of Energy’s $32 billion budget went to clean-energy programs. A spending increase of just $1 billion would make a big difference in the agency’s bottom line. But it would probably be easier to tuck another $1 billion or $2 billion on clean-energy spending into the Pentagon’s $518 billion budget. Last year, the Pentagon spent about $1 billion on renewable energy and energy-efficiency programs across its departments.

#### No capital

Washington Times 11/7 (“EDITORIAL: Obama: A lame-duck president,” http://www.washingtontimes.com/news/2012/nov/7/obama-a-lame-duck-president-lack-of-convincing-man/)

President Obama will enter his second term a lame duck from Day One. In fact, he has been limping along for some time already.¶ Tuesday’s result was no political mandate. In his victory speech, Mr. Obama told supporters, “You made your voice heard,” but the voice was more like a whisper. He attracted 9 million fewer votes than he did in his first campaign for “hope and change,” which is slightly more than John McCain earned in 2008. Mr. Obama is the first president since George Washington ran unopposed in 1792 to be re-elected with fewer popular votes, and he is the first since 1916 to regain office while shedding electoral votes. Thus Mr. Obama continues his march into the history books by securing the feeblest re-election ever.¶ The momentum and vast store of public approval Mr. Obama enjoyed at the outset of his first term has expired. In its place, he inherits a significant economic mess from himself, and he has no idea what to do about it. The administration’s lack of a plan for the second term will soon become apparent — the glossy pamphlet the Obama campaign distributed in the closing weeks of the race was no legislative agenda.¶ Presidential authority generally winds down in a second term. There are exceptions to this rule, but the exceptions are reserved for presidents backed by landslide re-elections like Lyndon Johnson and Ronald Reagan. These national leaders combined electoral momentum with renewed vision to hit their second term running. By contrast, Mr. Obama promoted his lack of new initiatives as a virtue. His weakness will be compounded if he does not shake up his White House team. The sense of sameness, staleness and weariness among long-serving members of the administration promotes a general mood of inertia.

#### Winners win- Second term depends on bold legislative moves

Ignatius 11/7 (David Ignatius, longtime writer and reporter, studied political theory at Harvard College and economics at Kings College, Cambridge, November 7, 2012, “A time for Obama to be bold,” Washington Post, http://www.washingtonpost.com/opinions/president-obama-go-big/2012/11/07/dbf545f8-28fc-11e2-bab2-eda299503684\_story.html?hpid=z4)

Barack Obama will be getting advice by the boatload over the next few weeks, but the best guidance may be what emerges from Caro’s biography “The Passage of Power”: Think big. Find strategies and pressure points that can break the gridlock in Congress, which was as rigid in 1963 as it is today. Surprise your adversaries with bold moves and concessions that create new space on which to govern.¶ As I watched Tuesday’s triumph, it seemed obvious that Obama needs the policy equivalent of David Plouffe, his senior campaign adviser. Plouffe’s genius was to decide early on that the race depended on nine battleground states; if he could deliver those states by a relentless and sometimes ruthless assault, he would win the larger victory. He was like a general who concentrates his forces at the points of greatest vulnerability and then prevails through sheer force of will.¶ Obama’s performance as president has often lacked this decisive, strategic quality. The notes are there but not the policy “music.” In both foreign and domestic policy, the impression of Obama, after his blunderbuss, first-year battles on health care and the Israeli-Palestinian issue, has been of a careful president who reacts to events, waits for others to make the first moves and plays to avoid losing rather than to win.¶ Well, Mr. President, what the hell’s the presidency for?¶ A strategic second term would begin by identifying a list of necessary and achievable goals, and then pursuing them with the unyielding manipulative skill of a Lyndon Johnson. On the top of everybody’s list would be a budget deal. Everybody knows, more or less, what it will require: changes in Social Security and Medicare that slow the growth of entitlement spending; reform of the tax code that produces a fairer and simpler system that raises revenue without limiting growth.¶ A road map is there in the Simpson-Bowles deficit-reduction plan, and Obama administration officials have been thinking privately for months about how to tweak the plan so it’s better and fairer. Mitt Romney’s generous concession speech Tuesday night opened a possible door, and the president should follow up his statement that he will “look forward to sitting down with Governor Romney to talk about where we can work together to move this country forward.” The president and his new Treasury secretary (Jack Lew?) should take the next step and ask Romney to help close the budget deal the country needs.¶ In foreign policy, Obama will need to be equally strategic. What does he want to accomplish? My list: a deal with Iran that verifiably limits its nuclear program and avoids war; a deal in Afghanistan that averts civil war when U.S. forces leave in 2014; a deal for a political transition in Syria (a shorthand Syria summary would be to organize the opposition so that it’s strong enough to bargain, then help win a Nobel Peace Prize for Vladimir Putin). And, finally, a deal to create a Palestinian state so that Israel has secure borders and the Arab world can get on with the process of becoming modern and democratic.¶ All these primary foreign policy goals are “deals,” and it follows that the president needs a dealmaker as secretary of state. Who could do that, after Hillary Clinton leaves, probably at the end of January? John Kerry is an experienced man who thinks outside the box and is willing to take risks. Even if the president is said to have found him somewhat windy as the stand-in for Romney during debate preparation, Kerry has shown over the past four years a willingness to negotiate with adversaries, in secret, to achieve results.¶ A longtime Democratic adviser argues that Obama needs the “Bolten Plan,” as in Josh Bolten, the White House chief of staff who mobilized the machinery of government to get it moving in the same direction in George W. Bush’s second term. This will never be a happy model for Democrats, but it captures an important point: A successful second term is less about ideology than about results.¶ Think big. Take risks. Get it done. Maybe someone should slip a note in Obama’s desk drawer that asks: What would Lyndon Johnson have done to make it happen?

### Oil DA

#### Russian weapons are secure- they have impassable security features and are easily recovered.

Mueller 2008 (John Mueller, pub. date: 1-1-08, Dept. of Political Science Ohio State Univ., “THE ATOMIC TERRORIST: ASSESSING THE LIKELIHOOD,” http://polisci.osu.edu/faculty/jmueller/APSACHGO.PDF)

It might be added that Russia has an intense interest in controlling any weapons on its territory since it is likely to be a prime target of any illicit use by terrorist groups, particularly, of course, Chechen ones with whom it has been waging an vicious on-and-off war for over a decade (Cameron 2004, 84). Officials there insist that all weapons have either been destroyed or are secured, and the experts polled by Linzer (2004) point out that "it would be very difficult for terrorists to figure out on their own how to work a Russian or Pakistan bomb" even if they did obtain one because even the simplest of these "has some security features that would have to be defeated before it could be used" (see also Kamp 1996, 34; Wirz and Egger 2005, 502; Langewiesche 2007, 19). One of the experts, Charles Ferguson, stresses You’d have to run it through a specific sequence of events, including changes in temperature, pressure and environmental conditions before the weapon would allow itself to be armed, for the fuses to fall into place and then for it to allow itself to be fired. You don't get off the shelf, enter a code and have it go off. Moreover, continues Linzer, most bombs that could conceivably be stolen use plutonium which emits a great deal of radiation that could relatively easily be detected by passive sensors at ports and other points of transmission.

#### No U.S. Russia War

Brzezinski 2005 (Zbigniew Brzezinski. (National Security Adviser Under the Carter Administration). "US Russia: Zbigniew Brzezinski Assesses US Russia Relations." Radio Free America. 11 May 2005. http://www.rferl.org/featuresarticle/2005/05/b62307e1-832c-4fbc-ab91-ba8fa7a0eb24.html)

There can be no cold war because Russia is in no position to wage either a hot or a cold war. It's a brutal effort to wage war in Chechnya which verges on genocide; it's at the same time a testimony to the incompetence of the Russian military. Russia's in no position to wage a cold war with America, either. Because Russia is essentially right now in a very serious social and demographic crisis. So a real cold war is not possible. Some issues are likely to continue being conflictual. In a broader sense, the American-Russian relationship is probably going to be described in less euphoric terms than has recently been the case, but the basic reality of a mixed relationship -- partially antagonistic, partially cooperative -- I think is going to endure. Former 'Sphere Of Influence' RFE/RL: Unlike in the rest of the world, where as you noted the United States is increasingly isolated and politically unpopular, the former Soviet sphere of influence embraces the United States. Seventy-two percent of Georgians approve of President Bush's visit on [9 April] there.... Under the circumstances that you outline, and given that this policy is bound to exacerbate tensions with Moscow, what do you think is the U.S. plan in that region, and what do you think it should be? Brzezinski: The United States is supporting and de facto promoting geopolitical pluralism in the space of the [former] Soviet Union. That is to say, it is supporting the independence of the post-Soviet states without seeking to turn them into American satellites -- but with the objective of making them viable as independent states. Part of the dilemma that Russia faces is that its nostalgia for an imperial status creates sustained and extensive hostility with all of its neighbors. It is impossible to mention a single neighbor of Russia with whom Russia has genuinely good relations. It is impossible to mention a single neighbor of Russia that likes Russia. And that is a problem which only the Russians can correct; it cannot be corrected for them by the Americans

#### No link-

#### No tradeoff

Toth 2006 (Ferenc L. Toth, senior energy economist with the Planning and Economic Studies Section in the Department of Nuclear Energy at IAEA, Hans-Holger Rogner, head of Planning and Economic Studies at IAEA, “Oil and nuclear power: Past, present, and future,” IAEA, http://www.iaea.org/OurWork/ST/NE/Pess/assets/oil+np\_toth+rogner0106.pdf)

The current relationship between nuclear power and oil has become distinctly different than it was a few decades ago. At the onset of the 21st century, nuclear and oil for electricity generation are targeting different electricity market segments with little overlap in the longer run. Oil for electricity generation in most industrialized countries serves, where not barred for environmental reasons, more the function of the disposal of residual oil for which no other applications can be found. However, advanced refineries converting larger portions of the barrel into premium products and stringent environmental regulation constrain the use of residual oil for power generation. Other uses of oil products include peak supply, back-up fuel, and dispersed non-grid generation. These markets have been relative captive for oil but this may change in the future with the advent of fuel cells. Since nuclear power has no role to play in these captive markets, growth prospects for oil are unaffected by a nuclear presence in the electricity generating market.

#### No indirect effects

Toth 2006 (Ferenc L. Toth, senior energy economist with the Planning and Economic Studies Section in the Department of Nuclear Energy at IAEA, Hans-Holger Rogner, head of Planning and Economic Studies at IAEA, “Oil and nuclear power: Past, present, and future,” IAEA, http://www.iaea.org/OurWork/ST/NE/Pess/assets/oil+np\_toth+rogner0106.pdf)

The second dimension of the oil–nuclear competition is indirect: nuclear electricity versus oil products at the level of end-use. It involves many factors including economics, productivity, convenience, regulation, availability, product quality, and social preferences. These factors limit the room for competition between electricity and oil products (and vice versa) in the residential, commercial, industrial, feedstock and transportation markets. Here the characteristics of fuels and associated conversion technologies can be an advantage or disadvantage in meeting a particular energy service demand. As we have witnessed over recent decades, transportation services have remained the domain of oil products despite many government policies targeted at the introduction of non-oil based transportation fuels including electric cars. Likewise, many energy services are exclusively a domain of electricity (information/communication, lighting, control, etc.) where oil products are essentially excluded. Electricity is an end-use energy technology without any emissions, highly efficient, versatile, and convenient to use. No wonder then that it has been the fastest growing end-use energy carrier worldwide. Oil use outside the transportation and chemical sectors (feedstock) and non-energy use has declined in the residential, commercial, and industrial sectors of the OECD countries (1973: 707 Mtoe; 2002: 403 Mtoe) in large part as a result of increased use of electricity and natural gas. In developing countries, oil use in these sectors has been increasing from 124 Mtoe to 354 Mtoe over the 1973–2002 period (IEA, 2004). Globally, however, oil use in these sectors has declined from 960 Mtoe to 811 Mtoe over this period.

#### Oil is losing ground in electricity markets already

Levi 2011 (Michael A. Levi, senior fellow and director of the program on energy security and climate change at the Council on Foreign Relations, March 16, 2011, “5 myths about nuclear energy,” Washington Post, http://www.washingtonpost.com/opinions/5-myths-about-nuclear-energy/2011/03/15/AB9P3Oe\_story.html?fb\_ref=NetworkNews)

When people talk about energy independence, they’re thinking about oil, which we mostly use in vehicles and industrial production. When they talk about nuclear, though, they’re thinking about electricity. More nuclear power means less coal, less natural gas, less hydroelectric power and less wind energy. But unless we start putting nuclear power plants in our cars and semis, more nuclear won’t mean less oil.¶ This wasn’t always the case: During the the heyday of nuclear power, the early 1970s (45 plants broke ground between 1970 and 1975), oil was a big electricity source, and boosting nuclear power was a real way to squeeze petroleum out of the economy. Alas, we’ve already replaced pretty much all the petroleum in the power sector; the opportunity to substitute oil with nuclear power is gone.

### CP

#### SMRs key, microgrids and renewables fail

Barton 2011 (Charles Barton, founder of the Nuclear Green Revolution blog with an MA in philosophy, April 1, 2011, “Future storm damage to the grid may carry unacceptable costs,” http://nucleargreen.blogspot.com/2011\_04\_01\_archive.html)

Amory Lovins has long argued that the traditional grid is vulnerable to this sort of damage. Lovins proposed a paradigm shift from centralized to distributed generation and from fossil fuels and nuclear power to renewable based micro-generation. Critics have pointed to flaws in Lovins model. Renewable generation systems are unreliable and their output varies from locality to locality, as well as from day to day, and hour to hour. In order to bring greater stability and predictability to the grid, electrical engineers have proposed expanding the electrical transmission system with thousands of new miles of transmission cables to be added to bring electricity from high wind and high sunshine areas, to consumers. This would lead, if anything, to greater grid vulnerability to storm damage in a high renewable penetration situation. Thus Lovins renewables/distributed generation model breaks down in the face of renewables limitations. Renewables penetration, will increase the distance between electrical generation facilities and customer homes and businesses, increasing the grid vulnerable to large scale damage, rather than enhancing reliability. Unfortunately Lovins failed to note that the distributed generation model actually worked much better with small nuclear power plants than with renewable generated electricity. Small nuclear plants could be located much closer to customer's homes, decreasing the probability of storm damage to transmission lines. At the very worst, small NPPs would stop the slide toward increased grid expansion. Small reactors have been proposed as electrical sources for isolated communities that are too remote for grid hookups. If the cost of small reactors can be lowered sufficiently it might be possible for many and perhaps even most communities to unhook from the grid while maintaining a reliable electrical supply. It is likely that electrical power will play an even more central role in a post-carbon energy era. Increased electrical dependency requires increased electrical reliability, and grid vulnerabilities limit electrical reliability. Storm damage can disrupt electrical service for days and even weeks. In a future, electricity dependent economy, grid damage can actually impede storm recovery efforts, making large scale grid damage semi-self perpetuating. Such grid unreliability becomes a threat to public health and safety. Thus grid reliability will be a more pressing future issue, than it has been. It is clear that renewable energy sources will worsen grid reliability, Some renewable advocates have suggested that the so called "smart grid" will prevent grid outages. Yet the grid will never be smart enough to repair its own damaged power lines. In addition the "smart grid" will be venerable to hackers, and would be a handy target to statures. A smart grid would be an easy target for a Stuxnet type virus attack. Not only does the "smart grid" not solve the problem posed by grid vulnerability to storm damage, but efficiency, another energy approach thought to be a panacea for electrical supply problems would be equally useless. Thus, decentralized electrical generation through the use of small nuclear power plants offers real potential for increasing electrical reliability, but successful use of renewable electrical generation approaches may worsen rather than improved grid reliability.

**US nukes inevitable- Existing plants and new construction**

**Mauldin 2012** (Paul Mauldin, June 12, 2012,“Nuclear Power: A Stay of Execution?,” Smart Energy Portal, http://smartenergyportal.net/article/nuclear-power-stay-execution)

In the meantime, even though the Fukushima disaster caused a ripple in the endemic U.S. anti-nuke community, the U.S. government is thankfully not suggesting that we abandon nuclear power anytime soon, and particularly not while we're trying to recover from a recession. Our 104 nuclear reactors produced 807 billion kWh in 2010, over 20% of total U.S. electrical output. Nuclear power has served us well and it's **not going away**. Following a 30-year period in which few new reactors were built in the U.S., as many as 6 new units may come on line by 2020 and there are 16 license applications to build 24 new nuclear reactors.

**No SMR meltdowns**

**Rosner and Goldberg 2011** (Robert Rosner, astrophysicist and founding director of the Energy Policy Institute at Chicago, and Stephen Goldberg, Special Assistant to the Director at the Argonne National Laboratory, Energy Policy Institute at Chicago, “Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S.”, Technical Paper, Revision 1, November 2011)

While the focus in this paper is on the business case for SMRs, the safety case also is an important element of the case for SMRs. Although SMRs (the designs addressed in this paper) use the same fuel type and the same light water cooling as gigawatt (GW)-scale light water reactors (LWRs), there are significant enhancements in the reactor design that contribute to the upgraded safety case. Appendix A provides a brief overview of the various technology options for SMRs, including the light water SMR designs that are the focus of the present analysis.¶ Light water SMR designs proposed to date incorporate passive safety features that utilize gravity-driven or natural convection systems – rather than engineered, pump-driven systems – to supply backup cooling in unusual circumstances. These passive systems should also minimize the need for prompt operator actions in any upset condition. The designs rely on natural circulation for both normal operations and accident conditions, requiring no primary system pumps. In addition, these SMR designs utilize integral designs, meaning all major primary components are located in a single, high-strength pressure vessel. That feature is expected to result in a much lower susceptibility to certain potential events, such as a loss of coolant accident, because there is no large external primary piping. In addition, light water SMRs would have a much lower level of decay heat than large plants and, therefore, would require less cooling after reactor shutdown. Specifically, in a post-Fukushima lessons-learned environment, the study team believes that the current SMR designs have three inherent advantages over the current class of large operating reactors, namely:¶ 1. These designs mitigate and, potentially, eliminate the need for back-up or emergency electrical generators, relying exclusively on robust battery power to maintain minimal safety operations.¶ 2. They improve seismic capability with the containment and reactor vessels in a pool of water underground; this dampens the effects of any earth movement and greatly enhances the ability of the system to withstand earthquakes.¶ 3. They provide large and robust underground pool storage for the spent fuel, drastically reducing the potential of uncovering of these pools.

**SMR accidents are contained- If they win they’re inevitable then it’s try or die**

**Wheeler 2010** (Jonathan Wheeler, engineer and nuclear consultant, November 21, 2010, “Small Modular Reactors May Offer Significant Safety & Security Enhancements,” This Week in Nuclear, http://thisweekinnuclear.com/?p=1193)

Small Modular Reactors (SMRs) are getting a lot of attention in the nuclear industry because they offer great potential for lower initial capital investment, scalability, and they come in sizes more appropriate for locations unable to accommodate larger 1000+ MW units. However, there are some big potential advantages that have not been widely discussed that could make SMRs a **game-changer**. These advantages are the potential for enhanced safety and security.¶ Let me explain.¶ The goal of nuclear plant emergency planning is to protect people from exposure to radiation they might receive during a reactor accident. That radiation exposure would come (mostly) from radioactive gas released into the air from a damaged nuclear plant. There are three physical barriers in all modern nuclear plants that keep radioactive gas inside the reactor: the metal cladding that encases the ceramic uranium fuel pellets, the thick steel reactor vessel and piping and that contains the reactor and coolant, and the concrete and steel containment building that encloses the reactor. For people to be in danger from a reactor accident first the fuel must overheat to create the radioactive gas. Then all three barriers (clad, system piping, and containment building) must be breached to provide a pathway for the radioactive gas to reach the atmosphere. Finally, there has to be a pressure difference to push the gas out of the plant and into the atmosphere. In water cooled reactors like most in use today, the hot water turns to steam and steam pressure builds up inside the containment. If the containment is breached this pressure pushes the radioactive gas through the hole to the air outside.¶ With this in mind, **s**mall **m**odular **r**eactor**s** offer several big advantages that make them safer:¶ They are smaller, so the amount of radioactivity contained in each reactor is less. So much less in fact, that even if the worse case reactor accident occurs, the amount of radioactive material released would not pose a risk to the public. In nuclear lingo we say SMRs have a smaller “source term.” This source term is so small we can design the plant and emergency systems to virtually eliminate the need for emergency actions beyond the physical site boundaries. Then, by controlling access to the site boundary, we can eliminate the need for off-site protective actions (like sheltering or evacuations).¶ These **sm**aller **r**eactor**s** contain less nuclear fuel. This smaller amount of fuel (with passive cooling I’ll mention in a minute) slows down the progression of reactor accidents. This slower progression gives operators more time to take action to keep the reactor cool. Where operators in large reactors have minutes or hours to react to events, operators of SMRs may have hours or even days. This means the chance of a reactor damaging accident is very, very remote.¶ Even better, most SMRs are small enough that they cannot over heat and melt down. They get all the cooling they need from air circulating around the reactor. This is a big deal because **if SMRs can’t melt down, then they can’t release radioactive gas that would pose a risk to the public.** Again, this means the need for external emergency actions is virtually eliminated.¶ Also, some SMRs are not water cooled; they use gas, liquid salt, or liquid metal coolants that operate at low pressures. This lower operating pressure means that if radioactive gases build up inside the containment building there is less pressure to push the gas out and into the air. If there is no pressure to push radioactive gas into the environment and all of it stays inside the plant, then it poses no risk to the public.

**Even big accidents have a low death count- Systemic health effects overblown- Nuke war outweighs**

**Muller 2012** (Richard Muller, Professor in the Department of Physics at the University of California at Berkeley, Faculty Senior Scientist at the Lawrence Berkeley Laboratory, Institute for Nuclear and Particle Astrophysics, August 18, 2012, “The Panic Over Fukushima,” Wall Street Journal, http://online.wsj.com/article/SB10000872396390444772404577589270444059332.html)

Denver has particularly high natural radioactivity. It comes primarily from radioactive radon gas, emitted from tiny concentrations of uranium found in local granite. If you live there, you get, on average, an extra dose of **.3 rem** of radiation per year (on top of the .62 rem that the average American absorbs annually from various sources). A rem is the unit of measure used to gauge radiation damage to human tissue.¶ The **I**nternational **C**ommission on **R**adiological Protection recommends evacuation of a locality whenever the excess radiation dose exceeds .1 rem per year. But that's one-third of what I call the "Denver dose." Applied strictly, the ICRP standard would seem to require the immediate evacuation of Denver.¶ It is worth noting that, despite its high radiation levels, Denver generally has a lower cancer rate than the rest of the United States. Some scientists interpret this as evidence that low levels of radiation induce cancer resistance; I think it is more likely that lifestyle differences account for the disparity.¶ Now consider the most famous victim of the March 2011 tsunami in Japan: the Fukushima Daiichi nuclear power plant. Two workers at the reactor were killed by the tsunami, which is believed to have been 50 feet high at the site.¶ But over the following weeks and months, the fear grew that the ultimate victims of this damaged nuke would number in the thousands or tens of thousands. The "hot spots" in Japan that frightened many people showed radiation at the level of **.1 rem**, a number quite small compared with the average excess dose that people happily live with in Denver.¶ What explains the disparity? Why this enormous difference in what is considered an acceptable level of exposure to radiation?¶ In hindsight, it is hard to resist the conclusion that the policies enacted in the wake of the disaster in Japan—particularly the long-term evacuation of large areas and the virtual termination of the Japanese nuclear power industry—were expressions of panic. I would go further and suggest that these well-intended measures did far more harm than good, not least in limiting the prospects of a source of energy that is safe, abundant and (as compared with its rivals) relatively benign for the environmental health of our planet.¶ If you are exposed to a dose of 100 rem or more, you will get sick right away from radiation illness. You know what that's like from people who have had radiation therapy: nausea, loss of hair, a general feeling of weakness. In the Fukushima accident, nobody got a dose this big; workers were restricted in their hours of exposure to try to make sure that none received a dose greater than 25 rem (although some exceeded this level). At a larger dose—250 to 350 rem—the symptoms become life-threatening. Essential enzymes are damaged, and your chance of dying (if untreated) is 50%.¶ Nevertheless, even a small number of rem can trigger an eventual cancer. A dose of 25 rem causes no radiation illness, but it gives you a 1% chance of getting cancer—in addition to the 20% chance you already have from "natural" causes. For larger doses, the danger is proportional to the dose, so a 50-rem dose gives you a 2% chance of getting cancer; 75 rem ups that to 3%. The cancer effects of these doses, from 25 to 75 rem, are well established by studies of the excess cancers caused by the atomic bombs at Hiroshima and Nagasaki in 1945. (A recent study of butterflies near Fukushima confirms the well-known fact that radiation leads to mutations in insects and other simple life-forms. Research on those exposed to the atomic bombs shows, however, no similar mutations in higher species such as humans.)¶ Here's another way to calculate the danger of radiation: If 25 rem gives you a 1% chance of getting cancer, then a dose of 2,500 rem (25 rem times 100) implies that you will get cancer (a 100% chance). We can call this a cancer dose. A dose that high would kill you from radiation illness, but if spread out over 1,000 people, so that everyone received 2.5 rem on average, the 2,500 rem would still induce just one extra cancer. That is, even if shared, the total number of damaged cells would be the same. Rem measures radiation damage, and if there is one cancer's worth of damage, it doesn't matter how many people share that risk.¶ In short, if you want to know how many excess cancers there will be, multiply the population by the average dose per person and then divide by 2,500 (the cancer dose described above).¶ In Fukushima, the area exposed to the **greatest radiation**—a swath of land some 10 miles wide and 35 miles long—had an estimated first-year dose of more than 2 rem. Some locations recorded doses as high as 22 rem (total exposure before evacuation). Afterward, the levels of radiation dropped quickly; the largest component came from iodine, and its level dropped by **50% every eight days**.¶ How many cancers will such a dose trigger? To calculate an answer, assume that the entire population of that 2-rem-plus region, about 22,000 people, received the highest dose: 22 rem. (This obviously overestimates the danger.) The number of excess cancers expected is the dose (22 rem) multiplied by the population (22,000), divided by 2,500. This equals 194 excess cancers.¶ Let's compare that to the number of normal cancers in the same group. Even without the accident, the cancer rate is about 20% of the population, or 4,400 cancers. Can the additional 194 be detected? Yes, because many of them will be thyroid cancer, which is normally rare (but treatable). Other kinds of cancer will probably not be observable, because of the natural statistical variation of cancers.¶ Sadly, many of those 4,400 who die from "normal" cancer will die believing that their illness was caused by the nuclear reactor. That is human nature; we search for reasons behind our tragedies. Of the roughly 100,000 survivors of the Hiroshima and Nagasaki blasts, we can estimate that about 20,000 have died or will die from cancer. But in only about 800 of these cases was the cancer caused by the bombs. We know that by looking at similar cities. Hiroshima and Nagasaki have experienced an increase in cancer among those exposed, but it is only a small increment of the natural rate. Yet far more than the estimated 800 victims attribute their cancers to the bomb.¶ What about the outlying regions of Fukushima? The next radiation zone around the reactor had a population of about 40,000 and an average dose of 1.5 rem. This yields a total dose of 60,000 total rem (40,000 times 1.5), making the number of expected extra cancers 24 (60,000 divided by 2,500).¶ These numbers are tragic, but they are smaller than the impression that people got from much of the news coverage in the wake of the disaster. Thanks to the early evacuation, the total number of deaths from the radioactive release in the Fukushima region will almost certainly be less than my figures above. A more reasonable estimate, using average exposures rather than the maximum ones, is 100 extra cancer deaths. That is bad, to be sure, but that number is minuscule compared with the 15,000 deaths caused by the tsunami.¶ What about more distant regions? Even a tiny bit of radiation averaged over a huge population could conceivably cause cancer. But we are immersed in "natural" radioactivity from cosmic rays (radiation coming from space) and from the earth (uranium, thorium and naturally radioactive potassium in the ground). These natural levels are typically 0.3 rem per year. We also are exposed to an additional 0.3 rem if we include average medical exposures from X-rays and other medical treatments. Some areas, like Denver, have even higher natural levels.¶ The most thoughtful high-number estimate of deaths that will be caused by the Fukushima disaster comes from Richard Garwin, a renowned nuclear expert. He has written that the best estimate for the number of deaths is about 1,500—well above my estimate but still only 10% of the immediate tsunami deaths.¶ Dr. Garwin uses the same numbers that I use, but he extrapolates forward in time 70 years to the continuing damage that residual radiation could cause, assuming that the radiation cannot be covered, cleaned or washed away, and that the population of Fukushima doesn't change. Moreover, he ignores the sort of argument that I have made about the Denver dose and includes in the calculation the numbers of deaths expected from tiny doses, assuming that even small exposures are proportionately dangerous. (This is an assumption that has also been adopted by the U.S. National Academy of Sciences.)¶ I don't dispute Dr. Garwin's number, but I believe it has to be understood in context. If you apply the same approach to Denver, you have to take into account the fact that the Denver dose is delivered every year. Over 70 years, it sums to 0.3 rem times 70, or 21 rem per person. If you multiply that by 600,000 people (the current population of Denver) and divide by the cancer dose of 2,500 rem, you get the expected cancer excess in Denver. That figure is 5,000, over three times higher than Dr. Garwin's number for Fukushima.¶ I am uncomfortable with these large numbers of predicted deaths. They are based on a theory that assumes proportionality in the way that radiation increases the likelihood of cancer—a theory that has never been tested, will not be tested in the foreseeable future, and which is known to fail for leukemia.¶ I can't be sure that the theory is wrong, but I consider these relatively large numbers for Denver and Fukushima to be misleading. Remember that Denver has a lower cancer rate than the rest of the U.S., not a higher one. There is a strong argument for ignoring radiation dangers below the level of the Denver dose. In doing so, we would be ignoring risks that are unobservable and which we routinely ignore (and properly so) in other circumstances.¶ Even though Dr. Garwin predicts 1,500 eventual deaths from the nuclear accident in Japan, he says the figure is small enough that the long-term evacuation of Fukushima itself would probably cause more harm than good. Evacuation causes disruption to lives that is hard to quantify but very real.¶ Some people believe that the proportionality assumption about radiation should be made because it gives a "conservative" estimate of possible risks. But beware of that adjective. What is conservative depends on your agenda. Is a conservative estimate one that likely overestimates deaths? If so, then it is likely to lead to more disruption through evacuation and panic. Is that truly conservative?¶ Another way to overestimate the deaths is to use a much higher value for the induced cancer risk than has been determined by the best scientific studies. I think the most useful estimate is the one I've given: From the radiation so far, perhaps 100 induced cancers. Residents of Fukushima who are concerned that residual radiation will cause additional risk can avoid that by leaving, but they need to recognize that any additional cancers will be statistically unobservable, hidden well below those of natural cancer and the other dangers of modern life.¶ The tsunami that hit Japan in March 2011 was horrendous. Over 15,000 people were killed by the giant wave itself. The economic consequences of the reactor destruction were massive. The human consequences, in terms of death and evacuation, were also large. But the radiation deaths will likely be a number so small, compared with the tsunami deaths, that they should not be a central consideration in policy decisions.¶ The reactor at Fukushima wasn't designed to withstand a 9.0 earthquake or a 50-foot tsunami. Surrounding land was contaminated, and it will take years to recover. But it is remarkable how small the nuclear damage is compared with that of the earthquake and tsunami. The backup systems of the nuclear reactors in Japan (and in the U.S.) should be bolstered to make sure this never happens again. We should always learn from tragedy. But should the Fukushima accident be used as a reason for putting an end to nuclear power?¶ Nothing can be made absolutely safe. Must we design nuclear reactors to withstand everything imaginable? What about an asteroid or comet impact? Or a nuclear war? No, of course not; the damage from the asteroid or the war would **far exceed** the tiny added damage from the radioactivity released by a damaged nuclear power plant.

## \*\*\*1AR\*\*\*

### Microgrids- Bubble

**Bankable contracts- Key to investors**

Rosner and Goldberg 2011 (Robert Rosner, astrophysicist and founding director of the Energy Policy Institute at Chicago, and Stephen Goldberg, Special Assistant to the Director at the Argonne National Laboratory, Energy Policy Institute at Chicago, “Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S.”, Technical Paper, Revision 1, November 2011)

6.2 GOVERNMENT SPONSORSHIP OF MARKET TRANSFORMATION INCENTIVES¶ Similar to other important energy technologies, such as energy storage and renewables, “market pull” activities coupled with the traditional “technology push” activities would significantly increase the likelihood of timely and successful commercialization.¶ Market transformation incentives serve two important objectives. They facilitate demand for the off-take of SMR plants, thus reducing market risk and helping to attract private investment without high risk premiums. In addition, if such market transformation opportunities could be targeted to higher price electricity markets or higher value electricity applications, they would significantly reduce the cost of any companion production incentives.¶ There are three special market opportunities that may provide the additional market pull needed to successfully commercialize SMRs: the federal government, international applications, and the need for replacement of existing coal generation plants.¶ 6.2.1 Purchase Power Agreements with Federal Agency Facilities¶ Federal facilities could be the initial customer for the output of the LEAD or FOAK SMR plants. The federal government is the largest single consumer of electricity in the U.S., but its use of electricity is widely dispersed geographically and highly fragmented institutionally (i.e., many suppliers and customers). Current federal electricity procurement policies do not encourage aggregation of demand, nor do they allow for agencies to enter into long-term contracts that are “bankable” by suppliers.¶ President Obama has sought to place federal agencies in the vanguard of efforts to adopt clean energy technologies and reduce greenhouse gas emissions. Executive Order 13514, issued on October 5, 2009, calls for reductions in greenhouse gases by all federal agencies, with DOE establishing a target of a 28% reduction by 2020, including greenhouse gases associated with purchased electricity. SMRs provide one potential option to meet the President’s Executive Order. One or more federal agency facilities that can be cost effectively connected to an SMR plant could agree to contract to purchase the bulk of the power output from a privately developed and financed LEAD plant.46 A LEAD plant, even without the benefits of learning, could offer electricity to federal facilities at prices competitive with the unsubsidized significant cost of other clean energy technologies.¶ Table 4 shows that the LCOE estimates for the LEAD and FOAK-1plants are in the range of the unsubsidized national LCOE estimates for other clean electricity generation technologies (based on the current state of maturity of the other technologies). All of these technologies should experience additional learning improvements over time. However, as presented earlier in the learning model analysis, the study team anticipates significantly greater learning improvements in SMR technology that would improve the competitive position of SMRs over time. Additional competitive market opportunities can be identified on a region-specific, technology-specific basis. For example, the Southeast U.S. has limited wind resources. While the region has abundant biomass resources, the estimated unsubsidized cost of biomass electricity is in the range of $90-130 per MWh (9-13¢/kWh), making LEAD and FOAK plants very competitive (prior to consideration of subsidies).47¶ Competitive pricing is an important, but not the sole, element to successful SMR deployment. A bankable contractual arrangement also is required, and this provides an important opportunity for federal facilities to enter into the necessary purchase power arrangements. However, to provide a “bankable” arrangement to enable the SMR project sponsor to obtain private sector financing, the federal agency purchase agreement may need to provide a guaranteed payment for aggregate output, regardless of actual generation output.48 Another challenge is to establish a mechanism to aggregate demand among federal electricity consumers if no single federal facility customer has a large enough demand for the output of an SMR module. The study team believes that high- level federal leadership, such as that exemplified in E.O. 13514, can surmount these challenges and provide critical initial markets for SMR plants.

### Microgrids- Solvency

**Microgrds and renewables exacerbate unreliability**

**BIESI 2011** (Brookings Institution Energy Security Initiative, The Hoover Institution Shultz-Stevenson Task Force on Energy Policy, October 2011, "Assessing the Role of Distributed Power Systems in the U.S. Power Sector", media.hoover.org/sites/default/files/documents/Distributed-Energy.pdf)

Microgrid¶ Generation technologies are central to discus- sions around distributed energy systems. Howev- er, controls, infrastructure and demand side man- agement are also an integral part of the broader discussion. The term ‘microgrid,’ is used to refer to a smaller version of a main or central electri- cal grid that much like its larger counterpart, consists of interconnected electrical loads and distributed energy generation resources that are typically controlled by a central control system. A microgrid may operate independently as its own self-contained entity, or may be interconnected with an adjoining central utility grid or neighbor- ing microgrid.¶ The concept of the microgrid is often associated with a power system in developing countries where the centrally managed grid is weak or in- adequate. However, **microgrid architectures are deployed in the United States** including in vari- ous communities **such as** university campuses, hospitals, industry and **military.** Fully 74 percent of the global microgrid market dollars were spent in North America in 2010.40¶ Although not a specific technology in itself, the notion of the microgrid is a system comprised of software, controls and hardware infrastruc- ture including sensors, inverters, switches and converters. The microgrid and its primary com- ponents form the platform that is necessary for the integration of distributed generation resourc- es with the local loads consuming the energy. The benefits of such architectures lie in the fact that they can be locally operated and controlled independent of a centrally managed utility. Such architecture enables distributed power systems, whether they operate on a stand-alone basis, or as an integrated component of a larger central grid.¶ 1.4 Functional Risks of DPS Technology¶ Despite the policy support and cost declines in **technology, DPS applications are constrained by several fundamental technical and functional factors. These factors give rise to risks associated with power quality, “dipatchability” and reliability.** Some of the most important technical risks of widespread DPS deployment and integration are listed below.¶ Power Quality¶ Some **DPS technologies rely on power electronic devices**, such as AC-to-DC or DC-to-AC convert- ers. **If such devices are not correctly set up, the integration of DPS power can result in a harmonic distortion and in operational difficulties to loads connected to the same distribution systems**.41¶ Reactive Power Coordination¶ **With the proper system configuration and net- work interface, DPS can bring relief to the power system by providing close proximity power sup- port at the distribution level. However**, some **renewable** generation **sources** such as wind can **worsen the reactive coordination problem. Wind generators have asynchronous induction generators designed for variable speed charac- teristics and**, therefore, **must rely on the network to which they are connected for reactive power support.42¶** Reliability and Reserve Margin¶ **Intermittent power generation** such as solar and wind **is non-dispatchable. It is thus necessary to maintain sufficient generation reserve margins in order to provide reliable power generation**. If there is a high level of distRU DA

#### No U.S. Russia War

Brzezinski 2005 (Zbigniew Brzezinski. (National Security Adviser Under the Carter Administration). "US Russia: Zbigniew Brzezinski Assesses US Russia Relations." Radio Free America. 11 May 2005. http://www.rferl.org/featuresarticle/2005/05/b62307e1-832c-4fbc-ab91-ba8fa7a0eb24.html)

There can be no cold war because Russia is in no position to wage either a hot or a cold war. It's a brutal effort to wage war in Chechnya which verges on genocide; it's at the same time a testimony to the incompetence of the Russian military. Russia's in no position to wage a cold war with America, either. Because Russia is essentially right now in a very serious social and demographic crisis. So a real cold war is not possible. Some issues are likely to continue being conflictual. In a broader sense, the American-Russian relationship is probably going to be described in less euphoric terms than has recently been the case, but the basic reality of a mixed relationship -- partially antagonistic, partially cooperative -- I think is going to endure. Former 'Sphere Of Influence' RFE/RL: Unlike in the rest of the world, where as you noted the United States is increasingly isolated and politically unpopular, the former Soviet sphere of influence embraces the United States. Seventy-two percent of Georgians approve of President Bush's visit on [9 April] there.... Under the circumstances that you outline, and given that this policy is bound to exacerbate tensions with Moscow, what do you think is the U.S. plan in that region, and what do you think it should be? Brzezinski: The United States is supporting and de facto promoting geopolitical pluralism in the space of the [former] Soviet Union. That is to say, it is supporting the independence of the post-Soviet states without seeking to turn them into American satellites -- but with the objective of making them viable as independent states. Part of the dilemma that Russia faces is that its nostalgia for an imperial status creates sustained and extensive hostility with all of its neighbors. It is impossible to mention a single neighbor of Russia with whom Russia has genuinely good relations. It is impossible to mention a single neighbor of Russia that likes Russia. And that is a problem which only the Russians can correct; it cannot be corrected for them by the Americans

#### Oil is losing ground in electricity markets already

Levi 2011 (Michael A. Levi, senior fellow and director of the program on energy security and climate change at the Council on Foreign Relations, March 16, 2011, “5 myths about nuclear energy,” Washington Post, http://www.washingtonpost.com/opinions/5-myths-about-nuclear-energy/2011/03/15/AB9P3Oe\_story.html?fb\_ref=NetworkNews)

When people talk about energy independence, they’re thinking about oil, which we mostly use in vehicles and industrial production. When they talk about nuclear, though, they’re thinking about electricity. More nuclear power means less coal, less natural gas, less hydroelectric power and less wind energy. But unless we start putting nuclear power plants in our cars and semis, more nuclear won’t mean less oil.¶ This wasn’t always the case: During the the heyday of nuclear power, the early 1970s (45 plants broke ground between 1970 and 1975), oil was a big electricity source, and boosting nuclear power was a real way to squeeze petroleum out of the economy. Alas, we’ve already replaced pretty much all the petroleum in the power sector; the opportunity to substitute oil with nuclear power is gone.

### Politics- Impact

#### No war

Thomas P.M. Barnett (senior managing director of Enterra Solutions LLC and a contributing editor/online columnist for Esquire magazine) August 2009 “The New Rules: Security Remains Stable Amid Financial Crisis” http://www.aprodex.com/the-new-rules--security-remains-stable-amid-financial-crisis-398-bl.aspx

When the global financial crisis struck roughly a year ago, the blogosphere was ablaze with all sorts of scary predictions of, and commentary regarding, ensuing conflict and wars -- a rerun of the Great Depression leading to world war, as it were. Now, as global economic news brightens and recovery -- surprisingly led by China and emerging markets -- is the talk of the day, it's interesting to look back over the past year and realize how globalization's first truly worldwide recession has had virtually no impact whatsoever on the international security landscape. None of the more than three-dozen ongoing conflicts listed by GlobalSecurity.org can be clearly attributed to the global recession. Indeed, the last new entry (civil conflict between Hamas and Fatah in the Palestine) predates the economic crisis by a year, and three quarters of the chronic struggles began in the last century. Ditto for the 15 low-intensity conflicts listed by Wikipedia (where the latest entry is the Mexican "drug war" begun in 2006). Certainly, the Russia-Georgia conflict last August was specifically timed, but by most accounts the opening ceremony of the Beijing Olympics was the most important external trigger (followed by the U.S. presidential campaign) for that sudden spike in an almost two-decade long struggle between Georgia and its two breakaway regions. Looking over the various databases, then, we see a most familiar picture: the usual mix of civil conflicts, insurgencies, and liberation-themed terrorist movements. Besides the recent Russia-Georgia dust-up, the only two potential state-on-state wars (North v. South Korea, Israel v. Iran) are both tied to one side acquiring a nuclear weapon capacity -- a process wholly unrelated to global economic trends. And with the United States effectively tied down by its two ongoing major interventions (Iraq and Afghanistan-bleeding-into-Pakistan), our involvement elsewhere around the planet has been quite modest, both leading up to and following the onset of the economic crisis: e.g., the usual counter-drug efforts in Latin America, the usual military exercises with allies across Asia, mixing it up with pirates off Somalia's coast). Everywhere else we find serious instability we pretty much let it burn, occasionally pressing the Chinese -- unsuccessfully -- to do something. Our new Africa Command, for example, hasn't led us to anything beyond advising and training local forces. So, to sum up: \* No significant uptick in mass violence or unrest (remember the smattering of urban riots last year in places like Greece, Moldova and Latvia?); \* The usual frequency maintained in civil conflicts (in all the usual places); \* Not a single state-on-state war directly caused (and no great-power-on-great-power crises even triggered); \* No great improvement or disruption in great-power cooperation regarding the emergence of new nuclear powers (despite all that diplomacy); \* A modest scaling back of international policing efforts by the system's acknowledged Leviathan power (inevitable given the strain); and \* No serious efforts by any rising great power to challenge that Leviathan or supplant its role. (The worst things we can cite are Moscow's occasional deployments of strategic assets to the Western hemisphere and its weak efforts to outbid the United States on basing rights in Kyrgyzstan; but the best include China and India stepping up their aid and investments in Afghanistan and Iraq.) Sure, we've finally seen global defense spending surpass the previous world record set in the late 1980s, but even that's likely to wane given the stress on public budgets created by all this unprecedented "stimulus" spending. If anything, the friendly cooperation on such stimulus packaging was the most notable great-power dynamic caused by the crisis. Can we say that the world has suffered a distinct shift to political radicalism as a result of the economic crisis? Indeed, no. The world's major economies remain governed by center-left or center-right political factions that remain decidedly friendly to both markets and trade. In the short run, there were attempts across the board to insulate economies from immediate damage (in effect, as much protectionism as allowed under current trade rules), but there was no great slide into "trade wars." Instead, the World Trade Organization is functioning as it was designed to function, and regional efforts toward free-trade agreements have not slowed. Can we say Islamic radicalism was inflamed by the economic crisis? If it was, that shift was clearly overwhelmed by the Islamic world's growing disenchantment with the brutality displayed by violent extremist groups such as al-Qaida. And looking forward, austere economic times are just as likely to breed connecting evangelicalism as disconnecting fundamentalism. At the end of the day, the economic crisis did not prove to be sufficiently frightening to provoke major economies into establishing global regulatory schemes, even as it has sparked a spirited -- and much needed, as I argued last week -- discussion of the continuing viability of the U.S. dollar as the world's primary reserve currency. Naturally, plenty of experts and pundits have attached great significance to this debate, seeing in it the beginning of "economic warfare" and the like between "fading" America and "rising" China. And yet, in a world of globally integrated production chains and interconnected financial markets, such "diverging interests" hardly constitute signposts for wars up ahead. Frankly, I don't welcome a world in which America's fiscal profligacy goes undisciplined, so bring it on -- please! Add it all up and it's fair to say that this global financial crisis has proven the great resilience of America's post-World War II international liberal trade order. Do I expect to read any analyses along those lines in the blogosphere any time soon? Absolutely not. I expect the fantastic fear-mongering to proceed apace. That's what the Internet is for.

#### No impact

Adams 2012 (Gordon Adams, Professor of International Relations at the School of International Service, American University and a Distinguished Fellow at the Stimson Center, October 17, 2012, “The Fiscal Slide,” Foreign Policy, http://www.foreignpolicy.com/articles/2012/10/17/the\_fiscal\_slide?page=0,1)

In September of this year, the Office of Management and Budget solemnly certified that these cuts would take 8.2 percent of FY2013 appropriated funds away from every "program, project, and activity" (PPA) in domestic discretionary spending and a whopping 9.4 percent from the "non-exempt" parts of the defense budget.¶ But does this mean the end of our national security (and domestic well-being), as the political debate suggests? A little careful noodling about the impact of a sequester on the Defense Department suggests it might not be the end of the world. In fact, it might be exactly the fiscal discipline DOD needs.¶ Let me get technical for a moment, so we can actually see what might go on. First, the law made it clear that the administration could exempt funding for troops and their benefits (including retiree benefits) from the fiscal cliff. The administration has done that, so the troops will be okay. (Their number is coming down anyway as a result of the end of the wars in Iraq and Afghanistan.)¶ Then, there is the matter of procurement and what some see as the almost cataclysmic level of devastation that such harsh cuts would impose on the defense industry. Except they won't. It turns out the industry is pretty healthy, it has been for a decade, and it is working on contracts that have been funded in prior budget years, which are exempt from sequestration.¶ As the director of defense procurement put it: "The vast majority of our contracts are fully funded, so there's no need to terminate existing contracts unless the product is no longer needed." Lockheed treasurer Ken Possenriede agreed that sequestration was not a near-term problem: "If sequestration happens, just based on our normal business rhythm, we're comfortable from a cash-on-hand standpoint that we'll endure that."¶ How about military operations, including the war? Well, the war budget, which has never really been separate from the non-war budget -- that's a political fiction the executive branch and Congress set up, but the funds are, in reality, mixed -- is included in a sequester, which might sound terrible for the troops in Afghanistan.¶ But, the reality is that the funds for DOD operations (war and much else) are very "fungible," as we budget wonks like to put it, meaning the funds can be moved around among programs pretty flexibly -- from training to education to base operations to the costs of operating troops in the field. And OMB and the Pentagon agree that "PPAs," in operations land, means "accounts." And accounts are things like Army Operations and Maintenance, which can cover all of the above activities. So, the service managers would have 9.4 percent fewer funds than the Congress gave them, but significant flexibility to move them around, setting priorities and making choices. Let's say they have a scalpel to work with, not a bludgeon

.¶ So what about research -- the investments in the future of defense technology? Well, here, too, there would be 9.4 percent fewer dollars than appropriated. But R&D is what they call a "level of effort" area of funding -- you buy as much R&D as the money allows, but you don't have to cut items out of a production contract. And the Pentagon would have some flexibility as well, since most R&D "program elements" cover a variety of R&D projects, so fewer resources means setting priorities and making choices.¶ Beyond these technical flexibilities, DOD, like other departments, would also have recourse to reprogramming funds and using its general transfer authority. The flexibility here is pretty great; over the past decades some reprogram and transfer totals have been in the tens of billions of dollars. What it takes is making the same tough choices, many of them internal. A few, the transfers, would have to be communicated to Congress, where the senior leadership of the key authorizing and appropriating committees (who don't want to devastate defense) would be likely to agree, especially as they were the most anxious to protect defense.¶ And OMB could alleviate the short-term urgency by agreeing to hold off on taking the cuts until later in the year, by approving overall funding ("apportionment") at a higher level early in the year, and delaying the cuts until later, when planning in DOD was complete.¶ It is not a pretty picture; no management expert would say this is the way to do defense (or any other) budgeting. But it is not doomsday. In fact, it might be discipline -- exactly the kind of budgetary discipline the Pentagon has not had for the past decade. Good management, priority-setting, and greater efficiency might be the result.¶ And since the sequester would be a one-off, setting a lower baseline for future defense growth, our national security might just be as safe as it ever was.

#### No freakout

Reich 2012 (Robert Reich, Chancellor’s Professor of Public Policy at the University of California at Berkeley, was Secretary of Labor in the Clinton administration, October 12, 2012, “How the fiscal cliff turns into a gentle 'fiscal hill',” Christian Science Monitor, http://www.csmonitor.com/Business/Robert-Reich/2012/1012/How-the-fiscal-cliff-turns-into-a-gentle-fiscal-hill)

As a practical matter, then, negotiations over America’s budget deficit will drag on into the new year, right over and beyond the fiscal cliff. A deal might not be struck until February, or even March.¶ But because everyone will know that the final compromise won’t be nearly as draconian – and is going to be retroactive to the start of the year — the cliff won’t feel like much of a cliff. In actual effect it will be more like a hill whose slope remains uncertain but will almost surely be gradual.

### Politics- Uniqueness

#### No deal despite posturing

Zurko 11/9 (Roz Zurko, Wall Street reacts to Obama and Boehner's 'lines in the sand', Examiner, http://www.examiner.com/article/wall-street-reacts-to-obama-and-boehner-s-lines-the-sand)

Wall Street reacted to President Obama and House Speaker John Boehner’s comments, which failed to offer any convincing evidence that the fiscal cliff can be avoided. According to Reuters on Friday, Nov. 9, 2012, both the S&P and the Nasdaq had risen one percent around midday, but then Boehner and Obama offered up their unchanged positions this gave Wall Street the reason to believe that a compromise is still out of reach. This in turn saw Wall Street "off highs" after Obama's comments.

1. [↑](#footnote-ref-1)
2. [↑](#footnote-ref-2)
3. [↑](#footnote-ref-3)
4. [↑](#footnote-ref-4)
5. [↑](#footnote-ref-5)
6. [↑](#footnote-ref-6)
7. [↑](#footnote-ref-7)
8. [↑](#footnote-ref-8)
9. [↑](#footnote-ref-9)
10. [↑](#footnote-ref-10)
11. [↑](#footnote-ref-11)
12. [↑](#footnote-ref-12)
13. [↑](#footnote-ref-13)
14. [↑](#footnote-ref-14)
15. [↑](#footnote-ref-15)
16. [↑](#footnote-ref-16)
17. [↑](#footnote-ref-17)
18. [↑](#footnote-ref-18)
19. [↑](#footnote-ref-19)
20. [↑](#footnote-ref-20)
21. [↑](#footnote-ref-21)
22. [↑](#footnote-ref-22)
23. [↑](#footnote-ref-23)
24. [↑](#footnote-ref-24)
25. [↑](#footnote-ref-25)
26. [↑](#footnote-ref-26)
27. [↑](#footnote-ref-27)
28. [↑](#footnote-ref-28)
29. [↑](#footnote-ref-29)