### T

#### A. Increase financial incentives presumes well developed, pre-existing program

Webster’s Dictionary 1998

Increase: to make greater, augment, implies to what is already well grown, or well developed

#### B. No SMR incentives have been fully developed

Rosner and Goldberg 11

(Robert Rosner, astrophysicist and founding director of the Energy Policy Institute at Chicago. He was the director of Argonne National Laboratory from 2005 to 2009, Stephen Goldberg, Special Assistant to the Director, Argonne National Laboratory ¶ Senior Fellow, Energy Policy Institute at Chicago¶ Research Coordinator, Global Nuclear Future Initiative ¶ American Academy of Arts and Sciences, “Small Modular Reactors – Key to Future Nuclear Power ¶ Generation in the U.S.” Energy Policy Institute at Chicago, <http://csis.org/files/attachments/111129_SMR_White_Paper.pdf>

As illustrated in the previous discussion, until significant learning benefits are achieved, the¶ LEAD SMR plant and some number of FOAK SMR plants may not be competitive with new¶ natural gas combined-cycle generation. Estimates of the number of SMR modules that may not¶ be competitive and the magnitude of the difference in cost are subject to significant uncertainty.¶ The estimates are dependent upon at least three key variables: the initial cost estimates39 for the¶ LEAD SMR design, the learning rate, and the future price of natural gas.40 The potential range of¶ uncertainty is illustrated in Figure 4, which identifies the generation cost differential ($/MWh)¶ between the family of SMR plants (LEAD, FOAK, and NOAK) and gas-fired plants for a variety¶ of natural gas price scenarios. This analysis adopts the 10% learning assumption and the¶ overnight cost estimate of $4,700/kW.¶ Assuming that early SMR deployments will carry cost premiums (until the benefits of learning¶ are achieved), the issue is whether federal government incentives are needed to help overcome¶ this barrier. Some may argue that commercial deployment will occur, albeit at a slower pace, as¶ the cost of alternatives increases to a level that makes initial SMR deployments competitive.¶ Others may argue that SMR vendors should market initial modules at market prices and absorb¶ any losses until a sufficient number of modules are sold that will begin to generate a profit.¶ However, the combination of the large upfront capital investment, the long period before a return¶ on capital may be achieved, and the large uncertainty in the potential level of return on¶ investment make it unlikely that SMRs will be commercialized without some form of¶ government incentive.¶ The present analysis assumes that government incentives will be essential to bridging this gap¶ and accelerating private sector investment (see Appendix D). It is the study team’s understanding¶ that DOE has proposed to share the cost of certain SMR design and licensing study activities.¶ This section analyzes possible options for government incentives for early deployments (LEAD¶ and FOAK plants) in addition to federal cost sharing for the design and licensing effort. The¶ present analysis considers several alternative approaches to providing such incentives, either in¶ the form of direct or indirect government financial incentives, or through market transformation¶ actions that will spur demand for FOAK plants in competitive applications. The study team’s¶ approach is to identify targeted, least-cost incentives that could form the basis for further¶ dialogue between stakeholders and policy makers.¶ Possible financial incentives need to be designed and evaluated relative to a particular¶ management model for deployment of LEAD and FOAK plants. The study team’s management¶ model assumes that these initial SMR plants will be managed and financed by the private sector,¶ consisting of a possible consortium of the SMR vendor, the reactor module manufacturer, other¶ major vendors, a host-site utility company, and one or more other electricity generation or¶ vertically integrated utilities. The types of incentives that could be structured for this type of¶ management model are discussed in the subsections that follow.

#### C. Vote neg-

#### Predictability. Our interp assures the neg a predictable list of possible affs, any increase in ALREADY OFFERED incentives in the federal budget. Their interp eliminates that caselist.

#### Ground. Our interp assures neg links to DAs and Ks and gives the aff a wealth of legit affs to choose from.

#### Precision: Increase is fundamentally different than create—their interp is grammatically incorrect.

#### D. Topicality is a voting issue for fair ground and education

### Disad

#### Obama will win- Polls prove but race could shift if an event comes up

Cook 10-4

Charlie is a National Journal Columnist and writes the Cook Political Report, “Mitt Romney Breaks his Losing Streak,” <http://nationaljournal.com/columns/cook-report/the-cook-report-romney-breaks-his-losing-streak-20121004>

Too many political observers see politics in an entirely binary way: Everything has to be either a “0” or a “1”; a race is either tied or it’s over; every election is either won or stolen. Some people never want to admit that their side lost. And some people think that a poll either tells them what they want to hear or is methodologically flawed—or crooked. It’s like an obnoxious sports fan (often found in Philadelphia) who views a ruling by a referee or umpire as either favorable or a bad call. Denial and simplicity reign.¶ The presidential election is neither tied nor over. Of the 16 most recent national polls using live telephone interviewers calling both respondents with landlines and those with cell phones (between 30 and 40 percent of voters do not have landlines and cannot legally be called by robo-pollsters), one has the race even, two have Obama with a narrow 2-point edge, five have 3-point Obama margins, two have 5-point Obama advantages, another pair have 6-point Obama leads, two have 7-point leads, and one has an 8-point Obama lead. This would strongly suggest that the Obama lead is between 3 and 6 percentage points; such brand-name polls as those by CNN, Fox News, and NBC News/Wall Street Journal are among those in that 3- to 6-point range.¶ Conversations with Democratic and Republican pollsters and strategists suggest that Colorado, Florida, North Carolina, and Virginia are the most competitive swing states. Some high-quality private polling shows Romney with very narrow leads in both North Carolina and Virginia, but a few other equally sophisticated surveys show Obama with narrow advantages in those two states. At least one private survey shows Florida even, but most show the Sunshine State and Colorado with narrow Obama leads, in the small- to mid-single-digit range. Just a hair or two better for Obama but still quite close are Nevada and Wisconsin, followed by Iowa. Things really get ugly for Romney in Ohio and Michigan, and, finally, in Pennsylvania, which is no longer competitive. Ohio shows a 5- to 8-point lead for Obama in private polling. In Michigan, Obama’s lead is slightly wider, and in Pennsylvania, Romney faces close to a 10-point deficit. It is mathematically possible for Romney to reach 270 electoral votes without Michigan, Ohio, or Pennsylvania, but it is in reality exceedingly unlikely.¶ It would take a very consequential event to change the trajectory of this race. Time will tell whether Romney’s strong debate performance on Wednesday night was the event that he needed—particularly in swing states such as Ohio. But at least he energized his supporters and sent a clear message that the race is not over.¶ As for down-ballot races, my hunch is that there is a pretty good chance that we may not know which party will hold a majority in the Senate in the next Congress by breakfast or lunch the day after the election. With 10 seats in the toss-up category—five for each party—the Senate outlook couldn’t be more volatile.¶ Republicans can be confident that they will pick up the open seat in Nebraska, but they have to be very worried about their own open seats in Indiana and Maine. The latter is particularly troublesome for the GOP. Republican incumbents Scott Brown in Massachusetts and Dean Heller in Nevada are in very tight races; the odds of Heller winning are better than those for Brown. The newest entry on the toss-up list is the open Republican seat in Arizona, where Democrat Richard Carmona has pulled even or slightly ahead of GOP Rep. Jeff Flake.¶ Conversely, Democrats have to be most worried about hanging on to the open seat in Connecticut, where former pro-wrestling CEO Linda McMahon now has a narrow lead, and in Montana, where incumbent Jon Tester is locked in a nail-biter. The top of the ticket is a challenge for both McMahon and Tester. Open seats in North Dakota, Virginia, and Wisconsin are statistical dead heats, notwithstanding some public polls that show rather substantial leads for former Democratic Gov. Tim Kaine over former Sen. George Allen in the Old Dominion.¶ A look at the polling data shows two inflection points in the presidential contest and many Senate races. The Democratic convention clearly had a positive impact for Democrats, while Republicans took a real hit after the release of the video of Mitt Romney suggesting that 47 percent of voters are basically deadbeats who see themselves as victims. We are now hearing reports of a similar drop for down-ballot Republicans in some districts, particularly in places like California and New York where Romney was already going nowhere. Many GOP candidates took a hit the week of Sept. 17, then stabilized the following week. They didn’t drop further but they didn’t regain any altitude, either.¶ For now, the GOP majority in the House seems fairly secure; The Cook Political Report currently sees GOP losses in the zero- to 10-seat range, well short of the 25-seat net gain Democrats need to gain control.¶ It’s always difficult to gauge how any event will be interpreted and what impact it will have on a campaign, but there is considerable evidence that the “47 percent” video did make a mark. Democratic pollster Peter Hart and his Republican counterpart Bill McInturff asked in the Sept. 26-30 NBC News/Wall Street Journal poll of 832 likely voters nationwide, “Has what you have seen, read, or heard in the past couple of weeks about Mitt Romney and his campaign for president given you a more favorable impression of him or a less favorable impression of him?” Some 28 percent responded that they felt more complimentary about Romney, but 51 percent indicated that what they heard made them feel less likely to support him.¶ Romney had a six-week stretch where nothing broke his way. Now we’ll see if his debate performance was a turning point—or a brief interruption—in the campaign narrative.

#### SMR’s incredibly unpopular- Batman

Deal-Blackwell 7/23

(Deborah, works with Los Alamos, founder of Hyperion Power Generation, ““Dark Knight Rises” Batman movie does infant SMR industry no favors” <http://ixpower.com/tag/small-modular-reactors/>, SEH)

But, I couldn’t believe it …Holy Plot Twist Batman! I cringed when we got to the part where they introduced the little nuclear reactor. ACK! The Nolan Brothers had written in Wayne Enterprises Applied Science Division developing an SMR (Small Modular nuclear power Reactor) that was used by the bad guys to threaten Gotham. In the movie, the bad guys gain access to the SMR and had a scientist magically presto changeo TURN IT INTO A FUSION NUCLEAR BOMB in what seemed like a turn of a screw, and in the space of a few minutes. As the movie progressed, and I became sore from my date nudging me with his elbow, darn it if the characters didn’t flip the sucker onto the back of the truck and drive around Gotham with it …!¶ GROAN! CRINGE! I know it’s just a movie and YOU know it’s just a movie, but golly, gosh darn, The Dark Knight Rises sure doesn’t help the rise of the fledging SMR industry! ¶ Fusion?! Ack! Fusion bomb?! Ack! Quickly retrofitting a power reactor to be a bomb?! Ack! Throwing it in a truck and driving it around the city?! ¶ Double Ack! The fairy tale spun further and further out of control. I wanted to bang my head on the seat in front of me. I don’t recall any other recent movies featuring a small nuclear power being turned into a bomb, and I sure wish this one had not.¶ Misconceptions about nuclear power abound today. Misconceptions and fear about SMRs, I’m afraid, will no doubt skyrocket after everyone gets around to seeing this movie. If you ask me, the release of this Batman flick hands the Union of Concerned Scientists a loaded Batpistol to scare the uninformed majority into opposing the development of SMRs. ¶ This movie could be a pain in the collective butts of those of us who believe SMRs have a place in the future of clean energy for our planet and may come back to haunt the nuclear industry – for both big and small power reactors. I’m pretty sure it will – just as sure as at the end of every Batman movie, the dark knight rises.¶

**Approval Rating is key, lines up perfectly with reelection  
Silver ’11**

Nate directs five thirty eight and is a statistician, “Approval Ratings and Reelection Odds,” <http://fivethirtyeight.blogs.nytimes.com/2011/01/28/approval-ratings-and-re-election-odds/>

Earlier this month, we posted the simple version of a finding, based on the historical record, that is worth keeping in mind when you read articles about how Barack Obama’s presidency has (or has not been) been revitalized: It’s just too soon for his approval ratings to tell us very much about his re-election prospects for 2012. This is an overdue follow-up to that article — what you might think of as the slightly-more-complicated version. While **it’s true that approval ratings aren’t of much use now, it’s also the case that, by the time we get close to the election, they will have become a very reliable predictor of Mr. Obama’s chances of winning another term**. Based on Gallup polling, here is what I estimate that the incumbent president’s approval rating was on Election Day in almost every election since 1940. (There is no data for 1944 because Gallup went on wartime hiatus.) There are a few tricks I had to employ to derive these numbers; I’d ask you to take them on faith for a few moments, and then we’ll explain everything later on. **At first glance, the relationship seems nearly perfect: every incumbent with an approval rating of 49 percent or higher won re-election, while every candidate with a rating of 48 percent or lower lost.** In practice, things probably don’t work quite that crisply. For example, Harry Truman, whom we estimate had a 50 percent approval rating on Election Day 1948, won by 4.5 points, and 114 electoral votes, over Thomas E. Dewey, which suggests that he had some margin to spare. And candidate quality clearly makes a difference. Although Robert Dole is sometimes considered a weak Republican nominee, Bill Clinton beat him in 1996 by just 8.5 points, despite Mr. Clinton’s 55 percent approval rating. By contrast, in 1972, Richard Nixon, with an approval rating only a couple of points higher (57 percent), trounced a very weak Democratic nominee, George McGovern, by more than 23 points. Still, the approval rating at which an incumbent candidate goes from being an underdog to a favorite for re-election is somewhere in the high 40s. **The reason the threshold is probably slightly below 50 percent rather than right at 50 percent is that in any approval survey, some people (typically 5 to 10 percent) say they are undecided about the president’s performance**. For instance, at this writing, Barack Obama’s Gallup approval rating is 49 percent but his disapproval rating is just 42 percent, a net margin of +7. If those were the figures on Election Day, he would be a favorite to win unless nearly everybody who was undecided about his performance cast their ballots against him, something that is possible in theory but usually doesn’t occur in practice. Now, then, how did we come up with these numbers? As I said, it’s not quite so straightforward. Gallup has approval ratings data going back to 1937. The problem is that, until fairly recently, they had a habit of stopping their approval ratings polling several months before a presidential election. For instance, in 1956, their last poll of Dwight Eisenhower’s public approval was in early August; they did not survey him again until late November, after he had already defeated Adlai Stevenson. However, we can extrapolate what Mr. Eisenhower’s rating would have been on Election Day 1956 by drawing a smoothed regression line — known in the business as a Loess curve — using the data points before and after that date. The one hitch is that incumbent presidents, whether they win, lose, or don’t run at all, almost always receive a “bounce” in their approval rating after the election, as people either rally around a winner or feel sympathy for the lame duck. The average magnitude of this post-election bounce is 4 points. So, before I fitted the curves, I subtracted 4 points from approval rating polls conducted after Election Day. By applying this process of bounce-adjustment and curve-fitting, we are able to estimate an incumbent president’s Gallup approval rating on Election Day itself or on any day before it, as shown in this nifty-looking graphic: I haven’t labeled the curves by the candidate’s name in the chart, because that which create too much clutter. But I have distinguished those who eventually won re-election (blue lines) from those who lost (red). A couple of cases are worth attention. The red line that you see briefly extending above 80 percent is for George H.W. Bush. His approval ratings, which were already pretty good, shot up following the start of Operation Desert Storm in 1991, when American-led forces drove Iraqi troops back from their occupation of Kuwait. Politically, that made Mr. Bush look like an extremely formidable candidate for re-election: Saturday Night Live ran a sketch later that year entitled “Campaign ’92: The Race To Avoid Being The Guy Who Loses To Bush,” with Democratic candidates at a debate all trying to lose so they would not have to run against him. But Mr. Bush’s approval ratings fell precipitously throughout late 1991 and early 1992, and were below 40 percent by Election Day. If Mr. Bush is the precedent that challengers will cite when their campaign seems to be flailing, the opposite example is the original Comeback Kid, Harry Truman. He’s the blue line that you still see down around 40 percent approval with just five months to go before the election of 1948. It’s hard to know exactly where Mr. Truman’s approval numbers were on Election Day. When Gallup surveyed in late June, he had just 39 percent approval; in January, 1949, after he had beaten Thomas E. Dewey, he was up to 69 percent; and then he reverted back to 50 percent just a couple months later. Our Loess curve estimates that Mr. Truman’s approval rating was probably around 50 percent on Election Day, but this is just a guess. What’s clear is that Mr. Truman was at some point an extremely unpopular president, and he nevertheless — to the great surprise of the Chicago Daily Tribune — defeated Mr. Dewey. Another thing to take from the graphic is how the red and blue lines gradually untangle themselves as the relationship between approval ratings and re-election becomes stronger over time. We can see this a bit more clearly by taking the average approval rating for the 8 winning candidates and the 3 losing ones and tracking them over the two years leading up to the election: I would resist the idea that there is any one magical date when approval ratings go from meaningless to meaningful as predictors of re-election. In the chart, the first time the winners and the losers begin to separate themselves is about 19 months before the election — which would correspond roughly to March of the prior year — but the split would have come a bit earlier if not for Mr. Bush’s Gulf War bounce. There’s also increasing differentiation in the period roughly 10 to 5 months before the election, corresponding with primary season. Still, for the most part, the separation occurs gradually. I’ve also tried to play around with various sorts of logistic regression models that attempt to predict a president’s chances at re-election based solely on his Gallup approval rating and the number of days until the election. Don’t take this terribly seriously — it’s hard to do anything very rigorous based on so few data points (just 11 presidents in the sample), and I can imagine better model designs than the one that I’ve used. But it does yield some ballpark estimates of what this data implies. **For example, a year in advance of the election, the model figures that a president with a 60 percent approval rating is about 90 percent likely to win re-election, whereas a 40 percent rating translates into a win probability of a bit below 40 percent**. So by that point the differences have become fairly meaningful: What does this mean for Barack Obama? Right now, we’re still in the period where the most useful number for estimating his re-election chances is not his approval rating but rather the historical track record of incumbent presidents. As I wrote on Wednesday, since the Civil War, 73 percent of incumbent presidents who sought another term won, as have 70 percent since World War II. Plugging Mr. Obama’s current numbers into the regression model that I described above yields a 65 percent likelihood of re-election — but again, this is a really rough guess, based mostly on the high historical batting average for incumbents rather than anything to do with Mr. Obama himself. What we can say is important is the range in which Mr. Obama’s approval ratings have been varying in recent months: between about 45 and about 50 percent. **If Mr. Obama’s approval rating is at the top of that range, 50 percent, on Nov. 6, 2012 — about where it is now — the model figures that his chances of winning re-election will be greater than 80 percent. But if his approval rating is at the bottom of the range instead, at 45 percent, his chances for a second term will be only about one in three,** and he’ll have to hope that the Republican nominee is a weak one. Much will change between now and then, of course. But Mr. Obama would probably win an election held next Tuesday — and that would not have been true a couple of months ago.

#### China label kills relations and the economy

Roach 8-28

Stephen is a lecturer at Yale University’s School of Management and Jackson Institute for International Affairs. He is also a Senior executive with Morgan Stanley, “How Romney Could go Wrong from Day 1,” <http://www.ft.com/intl/cms/s/0/c74802de-f0f9-11e1-89b2-00144feabdc0.html#axzz25ue916Yz>

True to his word as a candidate, a few hours after taking office as US president on January 20, 2013, Mitt Romney issued his first executive order, declaring China guilty of currency manipulation. In accordance with the Omnibus Trade and Competitiveness Act of 1988, President Romney’s act triggered immediate negotiations between US and Chinese officials. But the negotiations stalled and both parties blamed the other in press releases.¶ In early February, in his first State of the Union address, Mr Romney said: “Enough is enough. It is high time for China to play by our rules.” Congress roared its approval and within a week, overwhelming bipartisan majorities of both houses passed the Defend America Trade Act of 2013. Modelled on the currency manipulation “remedies” of countervailing tariffs first proposed in 2005, DATA was signed into law on President’s Day, February 18 2013. China was quickly deemed to be in violation of the new statute.¶ More¶ At that point negotiations took on a new urgency. But the new leaders in both countries were in no mood for compromise and the talks failed. In accordance with the provisions of DATA, Washington slapped immediate tariffs of 20 per cent on all Chinese products entering the US.¶ As plants shut down across China, Beijing declared this to be an act of economic war and filed a complaint with the World Trade Organization. Li Keqiang, newly installed as premier, announced after the National People’s Congress in March that China had no patience to endure a WTO dispute process that could take anywhere from two to five years to run its course.¶ China’s Ministry of Commerce then announced retaliatory tariffs of 20 per cent on all US exports to China. This hit growth-starved America right between the eyes. With $104bn of American-made goods sold in Chinese markets in 2011, China had become the US’s third-largest and its fastest-growing export market. To add insult to injury, China-dependent Walmart announced average price increases of 5 per cent. Other retailers followed suit. Talk of stagflation was in the air and hard-pressed American consumers hunkered down further.¶ US financial markets swooned. The stock market was hit by pressures on profit margins, growth and inflation. The bond market was also unnerved by the realisation that the Federal Reserve was seriously behind the curve. With good reason. After its meeting in June 2013, the Fed reaffirmed its ever-extending commitment to keep its benchmark policy rate near zero through 2015, and even dangled the possibility of yet another round of quantitative easing, QE4. Yields on 10-year Treasuries moved back above 4 per cent and stocks fell sharply further.¶ Feeling the heat from financial markets, Washington turned up the heat on China. Mr Romney called Congress back from its Independence Day holiday into a special session. By unanimous consent, Congress passed an amendment to DATA – upping the tariffs on China by another 10 percentage points.¶ At that point an indignant China turned to its own version of the big bazooka. The biggest foreign buyer of US debt was nowhere to be seen at the Treasury’s August 2013 auction. Long-term interest rates spiked and within weeks yields on 10-year Treasuries hit 7 per cent. The dollar plunged and the US stock market went into free fall.¶ Just like that, the so-called exorbitant privilege of the haven asset vanished. When asked at a press conference why China would willingly engage in actions that would undermine the value of more than $2tn in Treasuries and other dollar-based holdings, Zhou Xiaochuan, retiring governor of the People’s Bank of China, said: “This is not about risk-adjusted portfolio returns. We are defending our people against an act of economic war.”¶ By the autumn of 2013 there was little doubt of the severity of renewed recession in the US. Trade sanctions on China had backfired. Beleaguered American workers paid the highest price of all, as the unemployment rate shot back up above 10 per cent. A horrific policy blunder had confirmed that there was no bilateral fix for the multilateral trade imbalance of a savings-starved US economy.¶ In China, growth had slipped below the dreaded 6 per cent threshold and the new leadership was rolling out yet another investment stimulus for a still unbalanced and unstable Chinese economy. As the global economy slipped back into recession, the Great Crisis of 2008-09 suddenly looked like child’s play. Globalisation itself hung in the balance.¶ History warns us never to say never. We need only look at the legacy of US Senator Reed Smoot and Representative Willis Hawley, who sponsored the infamous Tariff Act of 1930 – America’s worst economic policy blunder. Bad dreams can – and have – become reality.

#### Economic decline causes nuclear war

Harris and Burrows, 09 –

PhD in European History @ Cambridge and Counselor of the US National Intelligence Council AND Member of the National Intelligence Council’s Long Range Analysis Unit (Mathew J. and Jennifer, “Revisiting the Future: Geopolitical Effects of the Financial Crisis,” April, Washington Quarterly, <http://www.twq.com/09april/docs/09apr_Burrows.pdf>)

Of course, the report encompasses more than economics and indeed believes the future is likely to be the result of a number of intersecting and interlocking forces. With so many possible permutations of outcomes, each with ample Revisiting the Future opportunity for unintended consequences, there is a growing sense of insecurity. Even so, history may be more instructive than ever. While we continue to believe that the **Great Depression** is not likely to be repeated, the **lessons** to be drawn from that period **include the harmful effects on** **fledgling** **democracies** and multiethnic societies (think Central Europe in 1920s and 1930s) **and** on the sustainability of **multilateral institutions** (think League of Nations in the same period). **There is no reason to think that this would not be true in the twenty-first** as much as in the twentieth **century.** For that reason, the ways in which **the potential for greater conflict could grow** would seem to be even more apt **in a** constantly **volatile economic environment** as they would be if change would be steadier. In surveying those risks, the report stressed the likelihood that terrorism and nonproliferation will remain priorities even as resource issues move up on the international agenda. **Terrorism**’s appeal **will decline if** economic **growth continues** in the Middle East and youth unemployment is reduced. For those terrorist groups that remain active in 2025, however, the **diffusion of technologies** and scientific knowledge **will place** some of **the world’s most dangerous capabilities within their reach**. Terrorist groups in 2025 will likely be a combination of descendants of long established groups\_inheriting organizational structures, command and control processes, and training procedures necessary to conduct sophisticated attacks and newly emergent collections of the angry and disenfranchised that become self-radicalized, particularly in the absence of economic outlets that would become narrower in an economic downturn. The most dangerous casualty of any economically-induced drawdown of U.S. military presence would almost certainly be the Middle East. Although Iran’s acquisition of nuclear weapons is not inevitable, worries about a nuclear-armed Iran could lead states in the region to develop new security arrangements with external powers, acquire additional weapons, and consider pursuing their own nuclear ambitions. It is not clear that the type of stable deterrent relationship that existed between the great powers for most of the Cold War would emerge naturally in the Middle East with a nuclear Iran. Episodes of low intensity **conflict** and terrorism taking place under a nuclear umbrella **could lead to an unintended escalation** and broader conflict if clear red lines between those states involved are not well established. The close **proximity of** potential **nuclear rivals** combined with underdeveloped surveillance capabilities and mobile dual-capable Iranian missile systems also will produce inherent difficulties in achieving reliable indications and warning of an impending nuclear attack. The lack of strategic depth in neighboring states like Israel, short warning and missile flight times, and uncertainty of Iranian intentions **may place more focus on preemption** rather than defense, potentially **leading to escalating crises**. 36 Types of **conflict** that the world continues to experience, such as **over resources, could reemerge,** particularly if protectionism grows and there is a resort to neo-mercantilist practices. **Perceptions of renewed energy scarcity** will drive countries to take actions to assure their future access to energy supplies. In the worst case, this **could result in interstate conflicts** if government leaders deem assured access to energy resources, for example, to be essential for maintaining domestic stability and the survival of their regime. Even actions short of war, however, will have important geopolitical implications. Maritime security concerns are providing a rationale for naval buildups and modernization efforts, such as China’s and India’s development of blue water naval capabilities. If the fiscal stimulus focus for these countries indeed turns inward, one of the most obvious funding targets may be military. Buildup of regional naval capabilities could lead to increased tensions, rivalries, and counterbalancing moves, but it also will create opportunities for multinational cooperation in protecting critical sea lanes. With water also becoming scarcer in Asia and the Middle East, **cooperation** to manage changing water resources **is** likely to be increasingly **difficult** both within and between states **in a** more **dog-eat-dog world.**

### Disad

#### Obama has the influence to prevail in fiscal cliff negotiations now---political capital is key

Sprung, 9/21

(Andrew Sprung is a political commentator & media consultant. He is the CEO of Sprung PR and hold a PhD from the University of Rochestor, “Ezra Klein's unconvincing theory that Obama misunderstands (or misrepresents) "change," http://xpostfactoid.blogspot.com/2012/09/ezra-kleins-unconvincing-theory-that.html)

In my view, Klein is viewing this question too narrowly. Obama is well aware of the limitations of the bully pulpit, and he's got to know better than any person on the planet that presidential advocacy polarizes, entrenching the opposing party in implacable opposition to whatever the president proposes. Yet, in presenting a revamped theory of how the presidency works, he's not just feeding us a line of BS. And if Obama wins reelection, I believe that we will look back five or ten or twenty years from now and recognize that yes, Obama did change the way Washington works. Or at the very least, he kept the US on a sane policy course in a time of extreme polarization and thus gave (will have given...) the system space to self-correct, as it has in the past. Let's start with Klein's objection to Obama's characterization of how healthcare reform got done: The health-care process, which I reported on extensively, was a firmly “inside game” strategy. There were backroom deals with most every major interest group and every swing legislator.... By the time the law passed, many more Americans viewed it unfavorably than viewed it favorably — exactly the opposite of what you’d expect if health care had passed through an “outside game” strategy in which, as Obama put it, “the American people … put pressure on Congress to move these things forward.” And yet, health care passed. The inside game worked. All true, laddie. And yet, in claiming that the impetus for healthcare reform came from the outside, I don't think Obama is attempting to whitewash this long and messy process -- or is even referring to it. He is alluding to the marshaling or channeling of popular will that got him elected. The essence of Obama's primary election argument against Hillary Clinton was that he was better equipped to marshal the popular will for fundamental change -- with healthcare reform as the centerpiece -- than she was. I well remember the moment when that argument first impressed itself on me. It was in a debate in the immediate aftermath of the Iowa caucuses, on Jan. 5, 2008: Look, I think it's easier to be cynical and just say, "You know what, it can't be done because Washington's designed to resist change." But in fact there have been periods of time in our history where a president inspired the American people to do better, and I think we're in one of those moments right now. I think the American people are hungry for something different and can be mobilized around big changes -- not incremental changes, not small changes. I actually give Bill Clinton enormous credit for having balanced those budgets during those years. It did take political courage for him to do that. But we never built the majority and coalesced the American people around being able to get the other stuff done. And, you know, so the truth is actually words do inspire. Words do help people get involved. Words do help members of Congress get into power so that they can be part of a coalition to deliver health care reform, to deliver a bold energy policy. Don't discount that power, because when the American people are determined that something is going to happen, then it happens. And if they are disaffected and cynical and fearful and told that it can't be done, then it doesn't. I'm running for president because I want to tell them, yes, we can. And that's why I think they're responding in such large numbers.

Cue the political science eye-roll. The American people were not "determined" that healthcare reform per se had to occur. You can't read the results of the 2008 wave election as a "mandate" for a specific policy. In the aftermath, the electoral tide went back out with a vengeance. But it's also true that in two years of campaigning Obama's words did inspire people, that the American people were hungry for change after Bush, that Obama made a broad and conceptually coherent case for moving the center of American politics back to the left with a renewed commitment to shared prosperity and investment in the common good, and that healthcare reform was at the center of that case. True too that the results of that election gave him enough of a majority to persist, even when relentless Republican misinformation and bad-faith negotiation and delay eroded public support. Obama also **used the bully pulpit at crucial point**s, if not to rally public opinion, at least **to re-commit wavering Democrats -**- and also to convince the public, as he enduringly has, that he was more of a **good faith negotiator**, more willing to compromise, than the Republicans. Those pressure points were the September 2009 speech he gave to a joint session of Congress, and the remarkable eight-hour symposium he staged with the leadership of both parties in late February 2010 to showcase the extent to which the ACA incorporated past Republican proposals and met goals allegedly shared by both parties, as well as his own bend-over-backwards willingness to incorporate any Republican ideas that could reasonably be cast as advancing those goals. In a series of posts about Ronald Reagan, Brendhan Nyhan has demonstrated that presidential rhetoric generally does not sway public opinion. Savvy politicians channel public opinion; transformative ones seize an opportunity when their basic narrative of where the country needs to go aligns with a shift in public opinion, usually in response to recent setbacks or turmoil. Obama, like Reagan, effected major change in his first two years because he caught such a wave -- he **amassed the political capital**, and he spent it, and we got what he paid for. The force from outside -- a wave election -- empowered Obama to work change from inside in a system that reached a new peak of dysfunctionality. Klein's also objects to Obama's pitch for how to effect change going forward. In 2011, he notes, Obama highlighted the substantial change won from the messy inside game of legislating, touting the long list of legislative accomplishments of the 111th Congress. In election season, he has reverted to a keynote of his 2008 campaign: change comes from you, the electorate; it happens when ”the American people … put pressure on Congress to move these things forward.” Klein regards this as election season hooey: But while this theory of change might play better, it’s the precise theory of change that the last few years have shattered. Whatever you want to say about the inside game, it worked. Legislation passed. But after the midterm elections, it stopped working. And so the White House moved towards an outside game strategy, where ”the American people … put pressure on Congress to move these things forward.” Perhaps the most public example was Obama’s July 2011 speech, in which he said: I’m asking you all to make your voice heard. If you want a balanced approach to reducing the deficit, let your member of Congress know. If you believe we can solve this problem through compromise, send that message. So many Americans responded that Congress’s Web site crashed. But Obama didn’t get his “balanced approach,” which meant a deal including taxes. Klein goes on to recount that throughout the past year of confrontation with the GOP, pushing a jobs package that had broad popular support, Obama won only one minor victory, extension of the payroll tax cut. He then reverts to two political science tenets: presidential advocacy entrenches the opposition, and it can't move popular opinion. But I think he misreads Obama's pitch, strategy and record on several counts. First, he **understates Obama's** (and the Democrats') **successes in the year of confrontation** that has followed the debt ceiling debacle. He writes off the payroll tax cut and unemployment benefit extension as small beer. But this was actually a near-total victory in two stages against entrenched opposition, and it won Obama some vital back-door stimulus for the second year running in the wake of the GOP House takeover. It was followed by a similar GOP cave-in on maintaining low student loan interest rates -- and then again, by the collapse of the House GOP effort to renege on the Budget Control Act and impose still more spending cuts. Presidential rhetoric may not change the public mind. But when it's in sync with voter's propensities, **it can deploy public opinion to bring pressure to bear on the opposition.** Second, it's true that under threat of GOP debt ceiling extortion, Obama successfully marshaled public opinion in favor of his "balanced" approach to deficit reduction but wasn't able to use that pressure to move the GOP off their no-new-taxes intransigence. **But that battle ain't over yet**, and popular support for Obama's position **is political capital that's still in the bank**. **In the upcoming fiscal cliff negotiations, Obama**, if he wins reelection, **will have the whip hand,** given the expiration of the Bush tax cuts and Republican teeth-gnashing over the defense cuts in the sequester. Speaking of which, Obama's refusal to intervene in the supercommittee negotiations as Republicans stonewalled once again over any tax hikes **banked him further capital in this upcoming fight**. Republicans are screaming much louder than Democrats about the sequester, disastrous though the cuts may be on the domestic side. Third, it's rational for Obama to recast his bid for change in election season, because of course he's seeking further "change" from the outside, i.e., more Democrats elected to Congress. He's not going to win a mandate as in 2008, or, most likely, majorities in both houses of Congress. But he has to make the pitch for being granted renewed tools to advance his agenda. Finally, a key part of Obama's "you are the change" pitch in his convention speech was a frank call to play defense -- to protect the changes wrought in his first term and fend off the further capture of the electoral process and the nation's resources by the oligarchy the GOP represents: If you turn away now – if you buy into the cynicism that the change we fought for isn’t possible … well, change will not happen. If you give up on the idea that your voice can make a difference, then other voices will fill the void: lobbyists and special interests; the people with the $10 million checks who are trying to buy this election and those who are making it harder for you to vote; Washington politicians who want to decide who you can marry, or control health-care choices that women should make for themselves.

#### Plan kills Obama

Petroleum Intelligence Weekly, 1/9/12, Obama Plays Safe on Energy Policy, Lexis

With less than a year to go **until he faces re-election**, US President Barack **Obama is trying to avoid controversial energy policy decisions**, postponing the finalization of restrictions on oil refinery and power plant emissions and delaying the approval of a major crude pipeline project. The president’s caution will prolong the status quo on issues where the industry both opposes and supports the administration’s plans, and also illustrates what's at stake for energy policy depending on whether or not Obama is given another four years in office. Most of Obama's original campaign **pledges on promoting alternatives to fossil fuels** and tackling climate change **have not passed muster with Congress**, most notably an ambitious plan for national carbon controls, a subsequent toned-down clean energy standard floated after the carbon legislation failed, and repeated efforts to repeal $30 billion-$40 billion worth of oil industry tax deductions over 10 years ( PIW May9'11 ). The one exception has been the passage of $90 billion in clean energy funding as part of an economic stimulus bill passed early in Obama's term, but **the White House has been unable to repeat** this **success in other energy policy areas** ( PIW Feb.23'09 ).

#### Presidential leadership is key to a compromise – the alternative is the collapse of hegemony, a double-dip recession, and war in the Middle East

Hutchison, U.S. Senator from the great state of Texas, 9/21/2012

(Kay Bailey, “A Looming Threat to National Security,” States News Service, Lexis)

Despite warnings of the **dire consequences**, **America is teetering at the edge of a fiscal cliff**, with January 1st, 2013 as the tipping point. On that date, **unless Congress and the White House can reach agreement** on how to cut the federal deficit, all taxpayers will be hit with higher taxes and deep cuts - called "sequestration" - will occur in almost all government spending, disrupting our already weak economy and putting our national security at risk.¶ According to the House Armed Services Committee, if sequestration goes into effect, it would put us on course for more than $1 trillion in defense cuts over the next 10 years. What would that mean? A huge hit to our military personnel and their families; devastating cuts in funding for critical military equipment and supplies for our soldiers; and **a** potentially **catastrophic blow to our** national defense and **security capabilities** in a time of increasing violence and danger.¶ All Americans feel a debt of gratitude to our men and women who serve in uniform. But Texas in particular has a culture that not only reveres the commitment and sacrifice they make to protect our freedom, we send a disproportionate number of our sons and daughters to serve.¶ The burden is not borne solely by those who continue to answer the call of duty, but by their families as well, as they endure separation and the anxiety of a loved one going off to war. These Americans have made tremendous sacrifices. They deserve better than to face threats to their financial security and increased risks to their loved ones in uniform, purely for political gamesmanship.¶ Sequestration would also place an additional burden on our economy. In the industries that support national defense, as many as 1 million skilled workers could be laid off. With 43 straight months of unemployment above 8 percent, it is beyond comprehension to add a virtual army to the 23 million Americans who are already out of work or under-employed. **Government and private economic forecasters warn that sequestration will push the country back into recession next year**.¶ The recent murder of our Ambassador to Libya and members of his staff, attacks on US embassies and consulates and continued riots across the Middle East and North Africa are stark reminders that great portions of the world remain volatile and hostile to the US. **We have the mantle of responsibility that being the world's lone super-power brings**. **In the absence of U.S. military leadership**, **upheaval in the Middle East would be worse**. **As any student of history can attest**, **instability does not confine itself to national borders**. **Strife that starts in one country can spread like wildfire across a region**.¶ Sequestration's cuts would reduce an additional 100,000 airmen, Marines, sailors and soldiers. That would leave us with the smallest ground force since 1940, the smallest naval fleet since 1915 and the smallest tactical fighter force in the Air Force's history. With the destabilization in the Middle East and other areas tenuous, we would be left with a crippled military, **a diminished stature internationally and a loss of technological** research, development and **advantage** - just as actors across the globe are increasing their capabilities.¶ Sequestration can still be avoided. **But that will require leadership from the President** that has thus far been missing. Congress and the White House must reach a long-term agreement to reduce $1 trillion annual budget deficits, without the harsh tax increases that could stall economic growth and punish working families.

#### Middle East goes nuclear

James A. Russell, Senior Lecturer, National Security Affairs, Naval Postgraduate School, ‘9 (Spring) “Strategic Stability Reconsidered: Prospects for Escalation and Nuclear War in the Middle East” IFRI, Proliferation Papers, #26, http://www.ifri.org/downloads/PP26\_Russell\_2009.pdf

**Strategic stability in the region is** thus **undermined by** various factors: (1) asymmetric interests in the bargaining framework that can introduce unpredictable behavior from actors; (2) **the presence of non-state actors that introduce unpredictability into relationships between the antagonists**; (3) **incompatible assumptions about** the structure of **the deterrent relationship that makes** the **bargaining** framework strategically **unstable;** (4) **perceptions by Israel and the United States that its window of opportunity** for military **action is closing, which could prompt a preventive attack**; (5) the prospect that Iran’s response to pre-emptive attacks could involve unconventional weapons, which could prompt escalation by Israel and/or the United States; (6) **the lack of a communications framework to build trust and cooperation among framework participants**. These systemic weaknesses in the coercive bargaining framework all suggest that escalation by any the parties could happen either on purpose or as a result of miscalculation or the pressures of wartime circumstance. Given these factors**, it is disturbingly easy to imagine scenarios under which a conflict could quickly escalate in which the regional antagonists would consider the use of** **chemical, biological, or nuclear weapons**. **It would be a mistake to believe the nuclear taboo can somehow magically keep nuclear weapons from being used** **in the context of an unstable strategic framework.** **Systemic asymmetries** between actors in fact s**uggest** a certain increase in **the probability of war** – a war in which escalation could happen quickly and from a variety of participants. **Once such a war starts, events would likely develop a momentum all their own** and decision-making would consequently be shaped in unpredictable ways. The international community must take this possibility seriously, and muster every tool at its disposal to prevent **such an outcom**e, which **would be an unprecedented disaster for the** peoples of the **region, with substantial risk for the entire world**.

### CP

#### Text: The fifty states and all relevant territories should enter into a compact that provides alternative financing for small modular reactors on military facilities in the United States

#### States incentives solve nuclear development

Dow Jones Newswires, 7

(5-21-07, “States Maneuver to Lure New Nuclear Power Plants” <http://investorshub.advfn.com/boards/read_msg.aspx?message_id=19778941>

In a positive shift for U.S. power companies planning a new fleet of nuclear facilities, nuclear power has gained popularity in several states as a solution to high power prices and growing demand. ¶ Louisiana, Florida, South Carolina and Georgia are offering incentives to develop new nuclear generation, hoping that nuclear power prices will be lower and less volatile than power generated by natural gas. State regulators also hope new nuclear power plants will create jobs and bolster local industry. Nuclear operators say state rules ensuring cost recovery of new plants - particularly pre-construction costs - will likely affect their decisions about where to build new plants. ¶ Louisiana and Florida have approved measures that would allow New Orleans-based Entergy Corp. (ETR) and Juno Beach, Fla.-based FPL Group (FPL) to pass on some pre-construction nuclear plant development costs to their customers, while Georgia regulators are considering a similar move.

### Grid

**Microgrids got the DOD off the grid**

Pike Research 11, market research and consulting firm that provides in-depth analysis of global clean technology markets, 9/16/’11

(<http://www.pikeresearch.com/newsroom/military-microgrid-capacity-to-experience-more-than-700-growth-by-2017>)

**Military Microgrid Capacity to Experience More than 700% Growth** by 2017¶ September 16, 2011¶ The United States Department of Defense (DOD) is the single largest consumer of petroleum in the world. U.S. military operations are also the largest consumer of all forms of energy globally. Microgrids, which enable distributed energy generation at a localized scale including the ability to “island” themselves from larger utility grids, can shrink the amount of fossil fuels consumed to create electricity by networking generators as a system to maximize efficiency. Microgrids enable military bases – both stationary and tactical – to **sustain operations no matter what is happening on the larger utility grid** or in the theater of war. ¶ According to a new report from Pike Research, the capacity of military microgrids will grow at a rate of 739% between 2011 and 2017, increasing from 38 megawatts (MW) to 316 MW during that period, under a baseline forecast scenario. The cleantech market intelligence firm expects that, under a more aggressive adoption scenario, stationary and mobile military microgrid capacity could reach as high as 817 MW during the same timeframe.¶ “The military’s **primary concern** is disruption of service from utility transmission and distribution lines,” says senior analyst Peter Asmus. “The lack of control and ownership of these lines – and the uneven quality of power service regionally throughout the United States – has **prompted the DOD to reexamine the existing electricity service delivery model.** This analysis has led the DOD to the inevitable conclusion that the **best way** to bolster its ability to secure power may well be through microgrid technology it can own and control.”¶ Asmus adds that, as awareness about the electrical grid’s vulnerability to terrorist attacks has increased in recent times, **the U.S. military has become one of the strongest proponents of microgrids**, which offer the ultimate secure power supply for fixed base mobile operations. Many army, navy, air force, and other related bases and offices already have vintage microgrids in place. What is new, says Asmus, is that these facilities are looking to **envelop entire bases** with microgrids and integrate distributed energy generation on-site. These resources, when capable of safe islanding from the surrounding grid, offer the ultimate security since fuel never runs out with renewable energy resources such as solar or wind. The opportunity to help develop these microgrids has attracted a number of powerful technology companies including Lockheed Martin, GE, Honeywell, Boeing, and Eaton.

#### No risk of blackout- grid break up

USA Today 8-1

“Similar Blackout is unlikely in the U.S.,” USA Today page 8-1

A massive, countrywide power failure like the one in India is "extremely unlikely" in the United States, energy experts say.¶ The U.S. electricity system is segmented in three parts with safeguards to prevent an outage in one system from tripping a blackout in another, "making blackouts across the country extremely unlikely," Energy Department spokeswoman Keri Fulton said.¶ "We are much, much less at risk for something like that happening here," said Gregory Reed, a professor of electric power engineering at University of Pittsburgh. "Most of our issues have been from natural disasters." The U.S. generates more than enough electricity to meet demand and always has power in reserve, Reed said.¶ Grid operators across the USA analyze power usage and generation in real time, factoring forces such as weather, and can forecast power supply and demand by the hour, said Arshad Mansoor, senior vice president of the Electric Power Research Institute in Washington.¶ "In any large, complex interactive network, the chance of that interconnection breaking up is always there," he said.

#### Russia/China won’t start cyber wars- MAD and unintended consequences

Strand ‘11

[Paul, CBN News Washington Sr. Correspondent. http://www.google.com/url?sa=t&rct=j&q=china preparing cyber warfare shut down us grid&source=web&cd=3&ved=0CF0QFjAC&url=http%3A%2F%2Fwww.cbn.com%2Fcbnnews%2Fus%2F2011%2FDecember%2FAmericas-Cyber-Defenses-A-Digital-Pearl-Harbor-%2F&ei=vx8qUOnDH6mi2QW8rIGwCg&usg=AFQjCNHOx-C6SgDeUag-7DD54V2n1iVLiw&cad=rja ETB.]

Carafano=James Carafano, National Security Analyst @ The Heritage Foundation.

Carafano doubts a global power would be foolhardy enough to start up a cyber war. ¶ "For the Chinese or the Russians or someone to say, 'Well, let's take down the American Internet.' Okay fine, so then Walmart can't order any goods from China anymore," he said. "Well then, China, you're kind of out of business. So there is this kind of mutual assured destruction there." ¶ Also, in this brave new cyber world, no one can be sure of nasty unintended consequences. Stuxnet, the first cyber attack that did real damage in the real physical world, is one example. ¶ "Stuxnet we now know was a malicious software that somebody did which was specifically designed to penetrate Iranian nuclear materials facilities. Well, that thing went global," Carafano pointed out. ¶ "It actually got all over the world. And I don't think the people who designed that expected that," he said.

#### Unipolarity dead and can’t be recovered

Rachman 11

(Gideon Rachman, Financial Times chief foreign affairs commentator, Zero-Sum Future, 2011, pp 3-4)

But the economic crisis that struck the world in 2008 has changed the logic of international relations. It is no longer obvious that globalization benefits all the world's major powers. It is no longer clear that the United States faces no serious international rivals. And it is increasingly apparent that the world is facing an array of truly global problems-such as climate change and nuclear proliferation-that are causing rivalry and division between nations. After a long period of international cooperation, competition and rivalry are returning to the international system. A win-win world is giving way to a zero-sum world. Both as individuals and as a nation, Americans have begun to question whether the "new world order" that emerged after the cold war still favors the United States. The rise of Asia is increasingly associated with job losses for ordinary Americans and with a challenge to American power from an increasingly confident China. The crash has heightened awareness of American economic vulnerability and the country's reliance on continued Chinese and Middle Eastern lending. Of course, even after the crash, the United States remains the most powerful country in the world-with its largest economy, its most powerful military, and its leading universities. But the United States will never recover the unchallenged superiority of the "unipolar moment" that began with the collapse of the Soviet Union

#### Entitlement spending makes hege collapse inevitable

Cohen ‘12

[Michael A. Cohen is a regular columnist for Foreign Policy's Election 2012 Channel and a fellow at the Century Foundation. <http://www.foreignpolicy.com/articles/2012/02/21/rotting_from_the_inside_out?page=full> ETB]

There is, however, one serious problem with this analysis. Any discussion of American national security that focuses solely on the issue of U.S. power vis-à-vis other countries -- and ignores domestic inputs -- is decidedly incomplete. In Kagan's New Republic article, for example, he has little to say about the country's domestic challenges except to obliquely argue that to focus on "nation-building" at home while ignoring the importance of maintaining U.S. power abroad would be a mistake. In fact, in a recent FP debate with the Financial Times' Gideon Rachman on the issue of American decline, Kagan diagnoses what he, and many other political analysts, appear to believe is the country's most serious problem: "enormous fiscal deficits driven by entitlements." Why is this bad? It makes it harder, says Kagan, for the United States to "continue playing its vital role in the world" and will lead to significant cutbacks in defense spending. However, a focus on U.S. global dominance or suasion that doesn't factor in those elements that constitute American power at home ignores substantial and worsening signs of decline. Indeed, by virtually any measure, a closer look at the state of the United States today tells a sobering tale of rapid and unchecked decay and deterioration in a host of areas. While not all of them are generally considered elements of national security, perhaps they should be.

#### Heg not solve war –

#### A. No threats require primacy and other factors ensure security.

Friedman and Preble 10 (Benjamin Friedman is a research fellow in defense and homeland security studies at the Cato Institute, Christopher Preble is director of foreign policy studies at the Cato Institute, Budgetary Savings from Military Restraint, September 22, 2010 Cato Policy Analysis No. 667 September 23, 2010 <http://www.cato.org/pubs/pas/PA667.pdf>

The United States confuses what it wants from its military, which is global primacy or hegemony, with what its needs, which is safety. Our leaders tend to exaggerate the capability of the enemies we have and invent new enemies by defining traditional foreign troubles —geopolitical competition among states and instability within them, for example—as pressing threats to our security. Geography, wealth, and nuclear weapons provide us with safety that our ancestors would envy. Our hyperactive military policies damage it by encouraging rivalry and resentment. Global military primacy is a game not worth the candle.56

#### B. No war – States have an incentive to avoid it.

Zakaria 08 (Fareed Zakaria, editor of Newsweek International, 2008, The Post-American World, p. 244)

In certain areas – the South China Sea, for example – U.S. military force is likely to be less relevant than that of China. In international negotiations, America will have to bargain and compromise with the others. Does all this add up to instability and disorder? Not necessarily. Two hundred years of Anglo-American hegemony has in fact created a system that is not as fragile is it might have been in the 1920s and 1930s. (When British power waned, American power was unwilling to stip in, and Europe fell through the cracks). The basic conception of the current system – an open world economy, multilateral negotiations – has wide acceptance. And new forms of cooperation are growing. Ann-Marie Slaughter has written about how legal systems are constructing a set of standards without anyone’s forcing them to do so—creating a bottom-up, networked order. Not every issue will lend itself to such stabilization, but many will. In other words, the search for a superpower solution to every problem may be futile and unnecessary. Small work-arounds might be just as effective.

#### US primacy in Asia and the Pacific is over – even before the crash of 08, China was already catching up

Rachman 11

(Gideon Rachman, Financial Times chief foreign affairs commentator, Zero-Sum Future, 2011, pp 187-188)

Even before the crash of 2008, the military balance between China and the United States was shifting. Aaron Friedberg of Princeton University noted in 2009 that China's sustained military buildup meant that "everyone of the relative handful of bases on which the United States relies to sustain its presence in East Asia will soon be within range of bombardment by repeated salvos of precisely targeted Chinese conventional ballistic and cruise missiles." 21 American aircraft carriers, the key to its Pacific strategy, are particularly vulnerable to new Chinese precision-guided weapons. Friedberg warned that "Washington must find ways to counter China's evolving anti-access capabilities. If it does not, America's longstanding military dominance in East Asia will quickly disappear." 22 He was not along in his concerns. In an article on the "Pentagon's wasting assets" for Foreign Affairs, also in 2009, Andrew Krepinevich worried that "East Asian waters are slowly but surely becoming a potential no-go zone for US ships." Krepinevich pointed out that "the US military's wasting assets are the direct consequence of the unavoidable loss of its near monopoly on guided weapons."23 China has also been working on its ability to knock out the communications satellites on which American hightech warfare depends. When China blasted one of its own satellites out of the sky with a missile test in January 2007, the move was widely interpreted as an implied threat to American satellites.24 This emerging power struggle is being followed closely around the world. In the aftermath of the financial crisis I was told by a senior British policy maker, "Everywhere you go in Asia, you find questions about how long American military dominance can be maintained."25

#### Asian war is unlikely --- all potential conflicts are solved by regional stability initiatives

Bitzinger & Desker ‘8

senior fellow and dean of S. Rajaratnam School of International Studies respectively (Richard A. Bitzinger, Barry Desker, “Why East Asian War is Unlikely,” Survival, December 2008, <http://pdfserve.informaworld.com-/678328_731200556_906256449.pdf>)

The Asia-Pacific region can be regarded as a zone of both relative insecurity and strategic stability. It contains some of the world’s most significant flashpoints – the Korean peninsula, the Taiwan Strait, the Siachen Glacier – where tensions between nations could escalate to the point of major war. It is replete with unresolved border issues; is a breeding ground for transnationa terrorism and the site of many terrorist activities (the Bali bombings, the Manila superferry bombing); and contains overlapping claims for maritime territories (the Spratly Islands, the Senkaku/Diaoyu Islands) with considerable actual or potential wealth in resources such as oil, gas and fisheries. Finally, the Asia-Pacific is an area of strategic significance with many key sea lines of communication and important chokepoints. Yet despite all these potential crucibles of conflict, the Asia-Pacific, if not an area of serenity and calm, is certainly more stable than one might expect. To be sure, there are separatist movements and internal struggles, particularly with insurgencies, as in Thailand, the Philippines and Tibet. Since the resolution of the East Timor crisis, however, the region has been relatively free of open armed warfare. Separatism remains a challenge, but the break-up of states is unlikely. Terrorism is a nuisance, but its impact is contained. The North Korean nuclear issue, while not fully resolved, is at least moving toward a conclusion with the likely denuclearisation of the peninsula. Tensions between China and Taiwan, while always just beneath the surface, seem unlikely to erupt in open conflict any time soon, especially given recent Kuomintang Party victories in Taiwan and efforts by Taiwan and China to re-open informal channels of consultation as well as institutional relationships between organisations responsible for cross-strait relations. And while in Asia there is no strong supranational political entity like the European Union, there are many multilateral organisations and international initiatives dedicated to enhancing peace and stability, including the Asia-Pacific Economic Cooperation (APEC) forum, the Proliferation Security Initiative and the Shanghai Co-operation Organisation. In Southeast Asia, countries are united in a common geopolitical and economic organisation – the Association of Southeast Asian Nations (ASEAN) – which is dedicated to peaceful economic, social and cultural development, and to the promotion of regional peace and stability. ASEAN has played a key role in conceiving and establishing broader regional institutions such as the East Asian Summit, ASEAN+3 (China, Japan and South Korea) and the ASEAN Regional Forum. All this suggests that war in Asia – while not inconceivable – is unlikely.

**No SCS impact**

**Creehan 12**

Senior Editor of the SAIS Review of International Affairs (Sean, “Assessing the Risks of Conflict in the¶ South China Sea,” Winter/Spring, SAIS Review, Vol. 32, No. 1)

Regarding Secretary Clinton’s first requirement, **the risk of actual¶ closure of the South China Sea remains remote, as instability in the region¶ would affect the entire global economy, raising the price of** various **goods¶ and commodities.** According to some estimates, for example, as much as **50¶ percent of global oil tanker shipments pass through the South China Sea**—¶ **that represents more than three times the tanker traffic through the Suez¶ Canal and over five times the tanker traffic through the Panama Canal**.4 **It**¶ **is in no country’s interest to see instability there**, least of all China’s, **given¶ the central economic importance of Chinese exports** originating from the¶ country’s major southern ports and energy imports coming through the¶ South China Sea (annual U.S. trade passing through the Sea amounts to¶ $1.2 trillion).5 Invoking the language of nuclear deterrence theory, **disruption¶ in these sea lanes implies mutually assured economic destruction**, and¶ that possibility should moderate the behavior of all participants. Furthermore,¶ **with the United States continuing to operate from a position of naval¶ strength** (or at least managing a broader alliance that collectively balances¶ China’s naval presence in the future), **the sea lanes will remain open**. While¶ small military disputes within such a balance of power are, of course, possible,¶ **the economic risks of extended conflict are so great that significant¶ changes to the status quo are unlikely.**

#### Cyber attack won’t cause an accidents—defense systems air gapped and resilient

Weimann‘4 (Gabriel, senior fellow, United States Institute of Peace, Professor of Communication, University of Haifa, Israel, December (Cyberterrorism: How Real Is the Threat?, Special Report, United States Institute of Peace, p. http://www.usip.org/ pubs/specialreports/sr119.pdf)

Many computer security specialists believe it is virtually impossible to use the Internet to inflict death on a large scaleand scoff at the notion that terrorists would bother trying. The resilience of computer systems to attack, they point out, isno accident but rather the result of significant investments of time, money, and expertise. Nuclear weapons and other sensitive military systems enjoy the most basic form of Internet security. They are "air-gapped," meaning that they are not physically connected to the Internet and are therefore inaccessible to outside hackers. The Defense Department has been particularly vigilant in protecting key systems by isolating them from the Internet and even from the Pentagon's internal computer network. All new software must be submitted to the National Security Agency for security testing.

#### Accidents won’t escalate—no causal connection

**Muller ‘9** (John, Woody Hayes Chair of National Security Studies, Mershon Center, Professor of Political Science at Ohio State, *Atomic Obsession,* pIOO-OI)

It is a plausible argument that, all other things equal, if the number of nuclear weapons in existence increases, the likelihood one will go off by accident will also increase. But, in fact, all things haven't been equal. **As nuclear weapons have increased in numbers** and sophistication, **so have safety devices and procedures.** Precisely **because** **the weapons are so dangerous. extraordinary** **efforts to keep them from going off by accident** or by an unauthorized deliberate act **have been** instituted, and these measures have. so far, been **effective:** no one has been killed in a nuclear explosion since Nagasaki. Extrapolating further from disasters that have not occurred, **many have been** led to a **concern that. triggered by** a **nuclear weapons accident. a war could** somehow **be started through an act of desperate irrationality** or of consummate sloppiness. Before the invention of nuclear weapons such possibilities were not perhaps of great concern, because no weapon or small set of weapons could do enough damage to be truly significant. Each nuclear weapon, however, is capable of destroying in an instant more people than have been killed in an average war, and the weapons continue to exist in the tens of thousands. However, **even if a bomb, or a few bombs. were to go off. it does not** necessarily **follow that war would result**. For that to happen, it is usually asserted, the accident would have to take place at a time of high war readiness, as during a crisis, when both sides are poised for action and when one side could perhaps be triggered-or panicked-into major action by an explosion mistakenly taken to be part of, or the prelude to, a full attack. 30 This means that the **unlikely happening-a nuclear accident-would have to coincide precisely with an event. a militarized** international **crisis something that is rare to begin with**, became more so as the cold war progressed, and has become even less likely since its demise. Furthermore, **even if the accident takes place during a crisis, it does not follow that escalation** or hasty response **is inevitable. or even** very **likely**. As Bernard Brodie points out, escalation scenarios essentially impute to both sides "a well-nigh limitless concern with saving face" and/or "a great deal of ground in automaticity of response and counter response:' None of this was in evidence during the Cuban missile crisis when there were accidents galore. An American spy plane was shot down over Cuba, probably without authorization, and another accidentally went off course and flew threateningly over the Soviet Union. As if that weren’t enough, a Soviet military officer spying for the West sent a message, apparently on a whim, warning that the Soviets were about to attack.3 None of these remarkable events triggered anything in the way of precipitous response. They were duly evaluated and then ignored.

#### No Asian conflict

Kato ‘8

(Yoichi, bureau chief of the American General Bureau of the Asahi Shimbun, “Return from 9/11 PTSD to Global Leader,” Washington Quarterly, Fall 2008, lexis)

The challenges that the Asia Pacific will face in the foreseeable future will not likely require the actual use of force or will likely be low intensity if they do. Both major potential flashpoints--North Korea and the Taiwan Strait--are showing a decline in tension. North Korea has recently provided a report of its nuclear facilities, although the contents have turned out to be far from satisfactory to other members of the six-party talks and the path to final denuclearization is not yet clear. Taiwan has elected a new president, Ma Ying-jeou, who has demonstrated more willingness for and flexibility in working with mainland China; and as a result, cross-strait tension has substantially declined. China has been continuing its military buildup and has engaged in some provocative actions, such as its January 2007 antisatellite test, but it has not shown any intention to challenge U.S. supremacy openly in the immediate future. For the time being, especially with the Beijing Olympic Games this year and the Shanghai World Exposition in 2010, it is widely speculated that China will concentrate on the peaceful growth of its economy while avoiding any military adventurism against the United States.

### Leadership

**Takes years after development to export SMR’s**

Kessides & Kuznetov 8-14

Ioannis is with the Development Group at the World Bank and Vladimir is a Consultant with the World Bank, “Small Modular Reactors for Enhancing Energy Security in Developing Countries,” <http://www.mdpi.com/2071-1050/4/8/1806/htm>

The generally acknowledged challenge for SMRs is to provide levelized unit electricity cost that is competitive with comparable base-load electricity generation sources in a user country. However, aside from this important economic challenge, SMRs may face other deployment challenges in developing countries. These potential issues include:¶ • Proven technology requirements by developing countries suggest that several units of the plant should have a proven operating experience of 3-5 years. All current SMRs designs are expected to be deployed first in their countries of origin or in another developed technology holder country. Such plants would need to operate for several years before they are offered for export to developing countries.

#### Material in SMR easily becomes weapons grade

Bourget 11

(Remy, Brown University student majoring in Middle Eastern Studies and International Relations, with a focus on Global Security. Intern at Center for Advanced Defense Studies, “Small Modular Reactors: Opportunity for Global Leadership and Innovation” Center for Advanced Defense Studies, 7/1/11, <http://www.c4ads.org/global-security-monitor/small-modular-reactors-opportunity-global-leadership-and-innovation>, SEH)

Proliferation is another important security concern, and there are two opposing views in the SMR debate. Some claim that because thorium is not a fissile material and there is only low-grade uranium used to start the fission reaction, the Liquid Fluoride Thorium Reactor model will avoid many of the security and proliferation concerns associated with traditional reactors. Ninety percent enriched uranium is needed for weapons, but only 20% (at most) would be used in the thorium reactions. Other scientists dispute this claim, saying that it is relatively easy to enrich uranium from 20% to 90%, which is weapons-grade.

#### Nuclear energy cred fails—countries say no to US tech if it constrains them

Cleary 12

Richard Cleary, American Enterprise Institute Research Assistant, 8/13/12, Richard Cleary: Persuading Countries to Forgo Nuclear Fuel-Making, npolicy.org/article.php?aid=1192&tid=30

The **examples** above **show** the **limitations of** both demand and **supply side efforts**. Supply side diplomatic interventions, made before the transfer of technology, have been at times effective, particularly in precluding nuclear fuel-making in the short term and buying time for more lasting solutions. However, as the Pakistan and Brazil cases illustrated, **supply side interventions are no substitute for demand side solutions: Countries face political choices regarding nuclear fuel-making**. **A nation set upon an independent fuel-making capacity**, such as Pakistan or Brazil, **is unlikely to give up efforts because of supply side controls. Multilateral fuel-making arrangements, as proposed repeatedly by the U**nited **S**tates, **have not materialized and** therefore **seem to have had little tangible influence**.

#### Prolif resistant trade doesn’t exist—nuclear coop always increases risk of prolif

Fuhrmann 9

Matthew Fuhrmann, Assistant Professor of Political Science at the University of South Carolina, Summer 2009, Spreading Temptation: Proliferation and Peaceful Nuclear Cooperation Agreements, http://belfercenter.hks.harvard.edu/files/Spreading-Temptation-Proliferation-and-Peaceful-Nuclear-Cooperation-Agreements.pdf

Recent **research finds that countries receiving** certain “**sensitive” nuclear assistance are more likely to acquire nuclear weapons**.126 For the reasons I argued above, the **relationship between nuclear assistance and proliferation is broader**. Training in nuclear engineering, the supply of research or power reactors, and the transfer of certain nuclear materials also affect proliferation. **To test whether my results may be driven by a few sensitive deals, I excluded them from the coding of my independent variable**. This type of sensitive agreement is extremely rare, so this change resulted in the removal of a small number of agreements. I then estimated all models displayed in table 4 with this alternate coding of the independent variable. **The findings** relevant to my argument **are** generally **unaltered when sensitive agreements are excluded** from my coding of atomic assistance.127¶ Conclusion¶ Aided by a new data set, this article systematically explored the relationship between civilian nuclear cooperation and nuclear proliferation. It argued that **civilian assistance and weapons proliferation are linked** because **the former leads to the supply of tech**nology **and materials that have applications for nu- clear energy and nuclear weapons, and** because **civilian assistance establishes an indigenous base of knowledge in nuclear matters that could be useful for a weapons program.** These **linkages reduce** the expected **costs of a nuclear weapons program, making states more likely to begin such a campaign** when they have accumulated peaceful assistance—**especially when** a crisis or **security threat arises**. Similarly, **countries receiving civilian aid are more likely to acquire nuclear bombs** **because** important **tech**nological **hurdles are lowered**.¶ The analysis conducted in this article lends support for these arguments, even when controlling for the other variables believed to influence proliferation. **Other factors are** also strong **predictors of proliferation, but peaceful nuclear cooperation is one of the more salient variables in explaining why atomic weapons spread**. Thus, this article suggests that students of proliferation should take greater stock of civilian nuclear assistance. This is particularly true given that the links between the peaceful and military uses of the atom appear broader than previously believed. **Even** seemingly “**innocuous” nuclear cooperation** such as providing training to nuclear scientists or supplying power/ research reactors **can produce deleterious effects. There is no such thing as “proliferation-proof” atomic assistance**.

#### ( ) Prolif Not Cause War –

#### A. History supports.

Tepperman ‘9 (Jonathan Tepperman a journalist based in New York City. “Why Obama should learn to love the bomb” Newsweek Nov 9, 2009 <http://jonathantepperman.com/Welcome_files/nukes_Final.pdf>)

**A growing** and compelling **body of research suggests** that **nuclear weapons** may not, in fact, make the world more dangerous, as Obama and most people assume. The bomb may actually **make us safer**. In this era of rogue states and trans-national terrorists, that idea sounds so obviously wrongheaded that few politicians or policymakers are willing to entertain it. But that’s a mistake. Knowing the truth about nukes would have a profound impact on government policy. Obama’s idealistic campaign, so out of character for a pragmatic administration, may be unlikely to get far (past presidents have tried and failed). But it’s not even clear he should make the effort. There are more important measures the U.S. government can and should take to make the real world safer, and these mustn’t be ignored in the name of a dreamy ideal (a nuke free planet) that’s both unrealistic and possibly undesirable. The argument that nuclear weapons can be agents of peace as well as destruction rests on two deceptively simple observations. First, nuclear weapons have not been used since 1945. Second, **there’s never been a** nuclear, or even a nonnuclear, **war between two states that possess them**. Just stop for a second and think about that: it’s hard to overstate how remarkable it is, especially given the singular viciousness of the 20th century. As Kenneth Waltz, the leading “nuclear optimist” and a professor emeritus of political science at UC Berkeley puts it, “We now have 64 years of experience since Hiroshima. It’s striking and against all historical precedent that for that substantial period, there has not been any war among nuclear states.” To understand why—and why the next 64 years are likely to play out the same way—you need to start by recognizing that **all states are rational** on some basic level. Their leaders may be stupid, petty, venal, even evil, but they tend to do things only when they’re pretty sure they can get away with them. Take war: **a country will start a fight only when it’s almost certain it can get what it wants at an acceptable price**. Not even Hitler or Saddam waged wars they didn’t think they could win. The problem **historically** has been that **leaders often make the wrong gamble and underestimate the other side**—and millions of innocents pay the price. **Nuclear weapons change all that by making the costs of war** obvious, inevitable, and unacceptable. Suddenly, when both sides have the ability to turn the other to ashes with the push of a button— and everybody knows it—the basic math shifts. Even the craziest tin-pot dictator is forced to accept that war with a nuclear state is unwinnable and thus not worth the effort. As Waltz puts it, “Why fight if you can’t win and might lose everything?” Why indeed? **The iron logic of deterrence** and mutually assured destruction **is so compelling**, it’s led to what’s known as the nuclear peace: the virtually unprecedented stretch since the end of World War II in which all the world’s major powers have avoided coming to blows. They did fight **proxy wars**, ranging from Korea to Vietnam to Angola to Latin America. But these **never matched the** furious **destruction of** full-on, great**-power war** (World War II alone was responsible for some 50 million to 70 million deaths). And since the end of the Cold War, such bloodshed has declined precipitously. Meanwhile, the nuclear powers have scrupulously avoided direct combat, and there’s very good reason to think they always will. There have been some near misses, but a close look at these cases is fundamentally reassuring—because in each instance, very different leaders all came to the same safe conclusion. Take the mother of all nuclear standoffs: the Cuban missile crisis. For 13 days in October 1962, the United States and the Soviet Union each threatened the other with destruction. But both countries soon stepped back from the brink when they recognized that a war would have meant curtains for everyone. As important as the fact that they did is the reason why: Soviet leader Nikita Khrushchev’s aide Fyodor Burlatsky said later on, “It is impossible to win a nuclear war, and both sides realized that, maybe for the first time.” The record since then shows the same pattern repeating: nuclear armed enemies slide toward war, then pull back, always for the same reasons. **The best recent example is India and Pakistan**, which fought three bloody wars after independence before acquiring their own nukes in 1998. **Getting their hands on weapons** of mass destruction didn’t do anything to lessen their animosity. But it did dramatically mellow their behavior. Since acquiring atomic weapons, the two sides have never fought another war.

#### B. So does the best statistical evidence.

Asal and Beardsley ‘7 (Victor Asal Department of Political Science, State University of New York, Albany and Kyle Beardsley Department of Political Science, Emory University “Proliferation and International Crisis Behavior” Journal of Peace Research 2007; 44; 139)

As Model 1 in Table IV illustrates, all of our variables are statistically significant except for the protracted conflict variable. Our primary independent variable, **the number of nuclear actors** involved in the crisis, **has a** negative relationship **with the severity of violence** and is significant. This lends preliminary support to the argument that **nuclear weapons have a restraining affect on crisis behavior**, as stated in H1. It should be noted that, of the crises that involved four nuclear actors – Suez Nationalization War (1956), Berlin Wall (1961), October Yom Kippur War (1973), and Iraq No-Fly Zone (1992) – and five nuclear actors – Gulf War (1990) – only two are not full-scale wars. While this demonstrates that the pacifying effect of more nuclear actors is not strong enough to prevent war in all situations, it does not necessarily weaken the argument that there is actually a pacifying effect. **The positive and statistically significant coefficient** on the variable that counts the number of crisis actorshas a magnitude greaterthan that on the variable that counts the number of nuclear actors. Since increases in the number of overall actors in a crisis are strongly associated with higher levels of violence, it should be no surprise that many of the conflicts with many nuclear actors – by extension, many general actors as well – experienced war. Therefore, **the results can only suggest** that, keeping the number of crisis actors fixed, **increasing the proportion of nuclear actors has a pacifying effect**. They do not suggest that adding nuclear actors to a crisis will decrease the risk of high levels violence; but rather, adding more actors of any type to a crisis can have a destabilizing effect. Also in Table IV, Model 2 demonstrates that the effect of a nuclear dyad is only approaching statistical significance, but does have a sign that indicates higher levels of violence are less likely in crises with opponents that have nuclear weapons than other crises. This lukewarm result suggests that it might not be necessary for nuclear actors to face each other in order to get the effect of decreased propensity for violence. **All actors should tend to be more cautious in escalation when there is a nuclear opponent, regardless of their own capabilities.** While this might weaken support for focusing on specifically a ‘balance of terror’ as a source of stability (see Gaddis, 1986; Waltz, 1990; Sagan & Waltz, 2003; Mearsheimer, 1990), it supports the logic in this article that **nuclear weapons can serve as a deterrent of aggression from both nuclear and non-nuclear opponents**.6 Model 3 transforms the violence variable to a binary indicator of war and demonstrates that the principal relationship between the number of nuclear actors and violence holds for the most crucial outcome of full-scale war. Model 4 demonstrates that accounting for the presence of new nuclear actors does not greatly change the results. The coefficient on the new nuclear actor variable is statistically insignificant, which lends credence to the optimists’ view that new nuclear-weapon states should not be presupposed to behave less responsibly than the USA, USSR, UK, France, and China did during the Cold War. Finally, Model 5 similarly illustrates that crises involving superpowers are not more or less prone to violence than others. Superpower activity appears to not be driving the observed relationships between the number of nuclear-crisis actors and restraint toward violence. It is important to establish more specifically what the change in the probability of full-scale war is when nuclear actors are involved. Table V presents the probability of different levels of violence as the number of nuclear actors increases in the Clarify simulations. The control variables are held at their modes or means, with the exception of the variable that counts the number of crisis actors. Because it would be impossible to have, say, five nuclear-crisis actors and only two crisis actors, the number of crisis actors is held constant at five. As we can see, the impact of an increase in the number of nuclear actors is substantial. Starting from a crisis situation without any nuclear actors, including one nuclear actor (out of five) reduces the likelihood of fullscale war by nine percentage points. As we continue to add nuclear actors, the likelihood of full-scale war declines sharply, so that the probability of a war with the maximum number of nuclear actors is about three times less than the probability with no nuclear actors. In addition, the probabilities of no violence and only minor clashes increase substantially as the number of nuclear actors increases. The probability of serious clashes is relatively constant. Overall, **the analysis** lends significant support to the more optimistic proliferation argument related to the expectation of violent conflict when nuclear actors are involved. While the presence of nuclear powers does not prevent war, **it** significantly reduces the probability of full-scale war**,** with more reduction as the number of nuclear powers involved in the conflict increases.

#### Technical barriers prevent nuclear terrorism—the risk is less than 1 in a million

Mueller ‘8

(John, poli sci prof at Ohio State Univ, “The Atomic Terrorist: Assessing the Likelihood,” 1-1, Prepared for presentation at the Program on International Security Policy, Univ of Chicago, 1-15-2008, http://polisci.osu.edu/faculty/jmueller/APSACHGO.PDF)

Appraising the barriers. As noted earlier, most discussions of atomic terrorism deal rather piecemeal with the subject--focusing separately on individual tasks such as procuring HEU or assembling a device or transporting it. But, as the Gilmore Commission, a special advisory panel to the President and Congress, stresses, building a nuclear device capable of producing mass destruction presents "Herculean challenges" and requires that a whole series of steps be accomplished. The process requires obtaining enough fissile material, designing a weapon "that will bring that mass together in a tiny fraction of a second, before the heat from early fission blows the material apart," and figuring out some way to deliver the thing. And it emphasizes that these merely constitute "the minimum requirements." If each is not fully met, the result is not simply a less powerful weapon, but one that can't produce any significant nuclear yield at all or can't be delivered (Gilmore 1999, 31, emphasis in the original). Following this perspective, an approach that seems appropriate is to catalogue the barriers that must be overcome by a terrorist group in order to carry out the task of producing, transporting, and then successfully detonating Allison's "large, cumbersome, unsafe, unreliable, unpredictable, and inefficient" improvised nuclear device. Table 1 attempts to do this, and it arrays some 20 of these--all of which must be surmounted by the atomic aspirant. Actually, it would be quite possible to come up with a longer list: in the interests of keeping the catalogue of hurdles down to a reasonable number, some of the entries are actually collections of tasks and could be divided into two or three or more. For example, number 5 on the list requires that heisted highly-enriched uranium be neither a scam nor part of a sting nor of inadequate quality due to insider incompetence; but this hurdle could as readily be rendered as three separate ones. In assembling the list, I sought to make the various barriers independent, or effectively independent, from each other, although they are, of course, related in the sense that they are sequential. However, while the terrorists must locate an inadequately-secured supply of HEU to even begin the project, this discovery will have little bearing on whether they will be successful at securing an adequate quantity of the material, even though, obviously, they can't do the second task before accomplishing the first. Similarly, assembling and supplying an adequately equipped machine shop is effectively an independent task from the job of recruiting a team of scientists and technicians to work within it. Moreover, members of this group must display two qualities that, although combined in hurdle 9, are essentially independent of each other: they must be both technically skilled and absolutely loyal to the project. Assessing the probabilities. In seeking to carry out their task, would-be atomic terrorists effectively must go though an exercise that looks much like this. If and when they do so, they are likely to find their prospects daunting and accordingly uninspiring or even dispiriting. To bias the case in their favor, one might begin by assuming that they have a fighting chance of 50 percent of overcoming each of these obstacles even though for many barriers, probably almost all, the odds against them are much worse than that. Even with that generous bias, the chances they could successfully pull off the mission come out to be worse than one in a million, specifically they are one in 1,048,567. Indeed, the odds of surmounting even seven of the twenty hurdles at that unrealistically, even absurdly, high presumptive success rate is considerably less than one in a hundred. If one assumes, somewhat more realistically, that their chances at each barrier are one in three, the cumulative odds they will be able to pull off the deed drop to one in well over three billion--specifically 3,486,784,401. What they would be at the (entirely realistic) level one in ten boggles the mind. Comparisons with the 9/11 conspiracy. The difficulties confronting the 9/11 hijackers were considerable, but they were nothing like those confronting the atomic terrorist. The 9/11 conspirators did maintain extensive secrecy and group loyalty on their daring and risky endeavor, and their planning does seem to have been meticulous. But the size of the conspiracy was very small, they never had to trust strangers or criminals, technical requirements were minimal, obtaining flight training only took the money to pay for it, the weapons they used could legally be brought on planes, and, most importantly, they were exploiting an environment in which the policy was to cooperate with hijackers rather than fight and risk the entire plane--indeed, only a few months earlier three Muslim terrorists, in this case Chechens, had commandeered a Russian airliner and had it flown to Saudi Arabia where they were then overcome by local security forces with almost no loss of life (Kramer 2004/05, 58). Even at that, the 9/11 hijackers failed to accomplish their mission with the last of the four planes. A comparison of the personnel requirements for each case may make this clear. The 9/11 plot necessitated the recruitment and the training (minimal, except for the pilots) of a single group of men who were absolutely loyal to the cause. However, aside from a general physical ability and a capacity to carry out orders, they needed little in the way of additional qualities. In the case of the terrorist bomb, the conspiracy--or, actually, the sequential sets of conspiracies--mandate the enlistment of a much larger number of people, and most of these must not only be absolutely loyal, but also extremely skilled at an elaborate series of technical, organizational, and conspiratorial tasks. The bottom line. Keller suggests that "the best reason for thinking it won't happen is that it hasn't happened yet," and that, he worries, "is terrible logic" (2002). "Logic" aside, there is another quite good reason for thinking it won't happen: the task is bloody difficult. The science fiction literature, after all, has been spewing out for decades--centuries, even--a wealth of imaginative suggestions about things that might come about that somehow haven't managed to do so. We continue to wait, after all, for those menacing and now-legendary invaders from Mars.

#### No one will sell terrorists nuclear tech

Mueller ‘8

(John, poli sci prof at Ohio State Univ, “The Atomic Terrorist: Assessing the Likelihood,” 1-1, Prepared for presentation at the Program on International Security Policy, Univ of Chicago, 1-15-2008, <http://polisci.osu.edu/faculty/jmueller/APSACHGO.PDF>)

It is also worth noting that, although nuclear weapons have been around now for well over half a century, no state has ever given another state--even a close ally, much less a terrorist group--a nuclear weapon (or chemical, biological, or radiological one either, for that matter) that the recipient could use independently. For example, during the Cold War, North Korea tried to acquire nuclear weapons from its close ally, China, and was firmly refused (Oberdorfer 2005; see also Pillar 2003, xxi). There could be some danger from private (or semi-private) profiteers, like the network established by Pakistani scientist A. Q. Khan. However, its activities were rather easily penetrated by intelligence agencies (the CIA, it is very likely, had agents within the network), and the operation was abruptly closed down when it seemed to be the right time (Langewiesche 2007, 169-72). In addition, al-Qaeda--the chief demon group and one of the few terrorist groups to see value in striking the United States--is unlikely to be trusted by just about anyone.7 As Peter Bergen (2007, 19) has pointed out, the terrorist group's explicit enemies list includes not only Christians and Jews, but all Middle Eastern regimes; Muslims who don't share its views; most Western countries; the governments of India, Pakistan, Afghanistan, and Russia; most news organizations; the United Nations; and international NGOs. Most of the time it didn't get along all that well even with its host in Afghanistan, the Taliban government (Burke 2003, 150, 164-65; Wright 2006, 230-1, 287-88; Cullison 2004).

### Solvency

#### Decade before solvency

St. Louis Post-Dispatch ‘12

[Jeffrey Tomich, <http://www.dispatch.com/content/stories/business/2012/05/10/small-problem.html> ETB]

For all the hype, small reactors are still at least a decade away. And that’s if design, licensing and commercial development go at the pace hoped for by the nuclear industry.¶ And even then, the potential for small reactors hinges on how they compete in the energy marketplace. More than concerns about nuclear safety in the wake of the Fukushima disaster in Japan or the problem of where to dispose of highly radioactive spent nuclear fuel, the technology’s future will be dictated by economics.¶ Jackson said Westinghouse aspires to make small reactors whose costs are equal to or less than full-size reactors.¶ For now, there’s no cost data for small reactors and no firm evidence they will produce electricity at a lower price than larger plants.¶ “It’s too early to determine that,” Klein said. “We’re going to have to see some built.”

#### SMRs empirically fail at commercialization

Magwood, commissioner – NRC, 7/14/’11

(William, “ECONOMICS AND SAFETY OF MODULAR REACTORS; COMMITTEE: SENATE APPROPRIATIONS; SUBCOMMITTEE: ENERGY AND WATER DEVELOPMENT,” CQ Congressional Testimony)

That is not to say that SMRs are a new idea. The conceptual benefits of small reactors have been the subject of discussion and analysis for decades, and all the potential benefits I've mentioned have been considered in the past. The potential advantages of smaller reactors prompted the government to provide considerable financial support for the development of the mid- size, passive-safety reactors in the 1990s and to encourage the pursuit of the pebble-bed modular reactor in the early years of this century.

**Both efforts proved unable to overcome** the **economic realities** of building and operating nuclear power plants realities that tend to penalize small reactors and reward larger designs. Thus, instead of the AP-600 and 500 megawatt Simplified Boiling Water Reactor of the early 1990s, the market pushed vendors to increase the size of their designs; today, vendors offer Generation III+ technologies based on those smaller systems the 1100 megawatt AP- 1000 and the 1600 megawatt Economic Simplified Boiling Water Reactor.2

Around the turn of the century, both DOE and industry became interested in the Pebble Bed Modular Reactor, or PBMR. This was a small, high-temperature gas-cooled reactor with a generating capacity of about 165 megawatts. This technology captured considerable media attention after U.S. companies became involved in an effort to build a commercial pilot in South Africa. However, as the high costs of the project became apparent, commercial participants began to peel away and eventually the South African project was abandoned.

**All small reactor technologies of the past failed** to find a way to overcome the fact that the infrastructure required to safely operate a nuclear power reactor of any size is considerable. Tons of steel and concrete are needed to construct containment buildings. Control rod drives, steam generators, and other key systems are **hugely expensive** to design and build. A larger plant with greater electric generating capacity simply has an inherently superior opportunity to recover these large up-front costs over a reasonable period.

So why is today different from yesterday? The greatest difference is the fact that the technology has evolved significantly over the years. Having learned lessons from the development of Generation III+ technologies and from the failure of previous small reactors, today's SMR vendors clearly believe they have solved the riddle of small reactor economics. They are presenting novel design approaches that could lead to significant improvements in nuclear safety. For example, design concepts that I have seen thus far further advance the use of passive safety systems, applying gravity, natural circulation, and very large inventories of cooling water to reduce reliance on human intervention during an emergency. SMR designs also apply novel technologies such as integral pressure vessels that contain all major system components and use fewer and smaller pipes and pumps, thereby reducing the potential for a serious loss-of- coolant accident.

Very importantly, these new SMRs are much smaller than the systems designed in the 1990s; this choice was made to assure that they could be factory-built and shipped largely intact by rail for deployment. The ability to "manufacture" a reactor rather than "constructing" it on-site could prove to be a major advantage in terms of cost, schedule reliability, and even quality control.

But will innovations like these allow this new breed of SMRs to be successful? Maybe.

Many years of work remain for SMR vendors to refine their designs and allow for the development of realistic and reliable cost estimates. **This is much the same state of affairs that existed in** the **2002** time frame when DOE launched the Nuclear Power 2010 program to spur the development and certification of Generation III+ designs such as the AP-1000. At that time, the level of design completeness was insufficient to enable vendors to provide utilities with reliable cost and schedule estimates.

#### SMRs not commercialized- natural gas

Scientific America 3/27

(David Biello, “Small Reactors Make a Bid to Revive Nuclear Power¶ Can small, LEGO-like reactors help create better prospects for the nuclear industry?” <http://www.scientificamerican.com/article.cfm?id=small-reactors-bid-to-revive-nuclear-power&print=true>, SEH)

Regardless of how cheap such small modular reactors may allow nuclear to be in future, it is unlikely to be as cheap as natural-gas-fired turbines in the present. In fact, low natural gas prices stalled the U.S. nuclear renaissance outside Georgia and South Carolina, long before the reactor meltdowns at Fukushima Daiichi in Japan. "Because of an unanticipated abundance of natural gas in the United States, nuclear energy, in general, is facing tough competition," noted an analysis of the prospects for small modular reactors from the University of Chicago published last November. The analysis also suggested that small reactors would be more expensive than large reactors on a per-megawatt basis until manufacturing in significant quantities has happened. "It [is] unlikely that SMRs

**SMRs will be developed slowly in the status quo - the plan speeds up the process which causes Fukushima-style accidents**

**Wang 12**

Ucilia Wang 12, renewable energy and green tech journalist for Forbes, 1/20/12, “Feds To Finance Small Nuclear Reactor Designs,” online: http:~/~/www.forbes.com/sites/uciliawang/2012/01/20/feds-to-finance-small-nuclear-reactor-designs/print/http://www.forbes.com/sites/uciliawang/2012/01/20/feds-to-finance-small-nuclear-reactor-designs/print/

**The U.S. Department of Energy** on Friday **announced a plan to support the design of so-called “small modular nuclear reactors” and popularize their use** for power generation.¶ **The plan is to fund two** reactor **designs** that will become available for licensing and production **by 2022.** The department is first asking for advice from the power industry on crafting the details of this project, and it hasn’t said how much it would dole out. But whoever wins the contracts to design the reactors will have to pony up money as well.¶ Small reactors are generally about one-third the size of existing nuclear reactors, and a power plant with small reactors promises to be cheaper to build and easier to obtain permits more quickly than a full-size nuclear power plant, proponents say. Utilities should have more flexibility in modifying the size of a power plant with small reactors – if they need more power, then they can add more reactors over time.¶ Nuclear reactors have historically been designed to be 1-gigawatt or more each because such scale helps to drive down the manufacturing and installation costs. Small reactors can be economical, too, advocates say, because they can be shipped more easily and cheaply around the world.¶ Energy Secretary Steve Chu has said he’s a big fan of small nuclear reactor technology.¶ “We think (small, modular nuclear) solves a lot of issues in terms of investments and electricity infrastructure,” Chu said at a press conference a year ago. “And it’s a way for the United States to regain its leadership in nuclear.”¶ Several startups and major power equipment makers are working on small modular nuclear reactors. They include TerraPower, which is backed by Bill Gates and recently received funding from Indian conglomerate Reliance Industries. TerraPower also has been talking to the governments of China, India and Russia, basically countries where nuclear power won’t likely receive the kind of intense opposition that you’ll find in the United States, Germany or Japan.¶ Other venture capital-funded startups include NuScale Power and Hyperion Power Generation (see a list from GigaOm). These companies aren’t just working on shrinking the size of the reactors. They also are investigating the use of different fuels and ways to reduce nuclear waste, for example.¶ Following the energy department’s announcement Friday morning, Westinghouse Electric Co. issued a statement to say it intends to apply for the funding. Westinghouse already is in the nuclear reactor design business. It received approval from the Nuclear Regulatory Commission for a large, 1,154-megawatt nuclear reactor called AP1000 last month. The energy department funded part of the project to design AP1000.¶ **Just because small nuclear reactors promise many** economic and environmental **benefits** (they don’t produce dirty air like coal or natural gas power plants do) **doesn’t mean they can be developed and made more quickly or cheaply**, however. **Technology companies also will have to prove that their small nuclear reactors can be just as safe if not safer than the** conventional, large-scale nuclear **reactors today.**¶ The **Fukushima** nuclear power plant disaster in Japan **has shown that a misstep in designing and operating a nuclear plant can have a far** greater and **more devastating impact than a mistake in running other types of power plants.** That means **nuclear power companies** — and the government — **will have to do a lot more to prove that nuclear power should remain an important part of the country’s energy mix.**