# Wake – Round 8 vs. George Washington CR (Aff)

## 1AC

### Inherency

#### Observation One: Inherency

#### Nuclear renaissance now – US subsidizing the industry

Worthington 12 (David Worthington, February 9, 2012, The U.S. nuclear renaissance has begun , Smart Planet, <http://www.smartplanet.com/blog/intelligent-energy/the-us-nuclear-renaissance-has-begun/13058>) JD

There are cooling towers on the horizon in the United States. The nuclear renaissance is slated to begin in rural Georgia with new reactors being built over the next five years, and work is already underway to leap another generation ahead. The Nuclear Regulatory Commission (NRC) today announced that it has granted licenses to a consortium of utilities to erect two [Westinghouse AP 1000](http://www.ap1000.westinghousenuclear.com/) reactors at Southern Company’s existing Vogtle site, clearing a path to end a decades long hiatus in new construction. Westinghouse’s design incorporates passive cooling, which extends the duration under which a reactor can operate safely without outside intervention in the event of a disaster. The AP 1000 is classified as Generation III+ reactor. Generation III+ reactors have more [redundant systems](http://www.smartplanet.com/blog/intelligent-energy/americas-nuclear-future/6946) than older reactor designs. Those include emergency cooling systems, a double containment system, and an ashtray like cooling area to capture molten fuel in the event of a meltdown. Existing U.S. nuclear reactors require active cooling such as electric water pumps. Japan’s Fukushima used active cooling, and its reactors melted down last spring when external power was unavailable. There are a total of 104 nuclear plants in the U.S today that are dependent upon active cooling. The meltdown risk associated with those legacy reactors and the high capital requirements of nuclear power are some of the reasons why no new reactor has been built in the U.S since the late 1970’s, when the 1979 Three Mile Island incident soured public sentiment. For now, anti-nuclear sentiment has been marginalized. The U.S. is energy hungry and nuclear power is receiving generous government subsidies. The Vogtle reactors would power up to 1 million homes at a cost of US$14 billion, CNN [reported.](http://money.cnn.com/2012/02/08/news/economy/nuclear_reactors/index.htm?hpt=hp_t3)

#### This renaissance is global – Fukushima doesn’t matter and reactors being built now.

Marketwire 12

[5/3/12, – Part of the Paragon Report on uranium ore stock future

http://finance.yahoo.com/news/nuclear-renaissance-back-track-122000381.html]

NEW YORK, NY--(Marketwire -05/03/12)- Last year the Fukushima disaster in Japan started a downward spiral for companies in the Uranium Industry. Approximately one year later the industry looks to be finally recovering as the Global X Uranium ETF (URA) is up nearly 12 percent year-to-date. "Fukushima put a speed bump on the road to the nuclear renaissance," Ganpat Mani, president of Converdyn, said at a nuclear industry summit. "It's not going to delay the programs around the world." The Paragon Report examines investing opportunities in the Uranium Industry and provides equity research on Cameco Corporation (CCJ - News) and Uranium One, Inc. (UUU.TO - News). Approximately 650 million people in China and India currently are living without electricity. With the high costs of fossil fuel the most viable options for these countries would be nuclear power. Indonesia, Egypt, and Chile are among some of the nations that have plans to build their first nuclear power station, the list of countries operating atomic plants currently stands at 30. According to numbers released by the World Nuclear Association there are 61 reactors that are presently under construction, and plans to build another 162. "In two years, there will be very strong demand on the market, as new reactors start operating, and as new contracts with the existing fleet kick in," Areva SA's Chief Commercial Officer Ruben Lazo said in a previous interview.

#### But, the US is not reversing course on reprocessing.

Saillan 10 (Charles, attorney with the New Mexico Environment Department, Harvard Environmental Law Review, 2010, “DISPOSAL OF SPENT NUCLEAR FUEL IN THE UNITED STATES AND EUROPE: A PERSISTENT ENVIRONMENTAL PROBLEM”, Vol. 34, RSR)

The U.S. government’s position on reprocessing changed in 1974 when India exploded a nuclear weapon in the state of Rajasthan. 150 The weapon’s plutonium was isolated with reprocessing equipment imported for “peaceful purposes.” 151 Rightly concerned about the dangers of nuclear proliferation, President Ford announced that the United States would no longer view reprocessing as a necessary step in the nuclear fuel cycle. He called on other nations to place a three-year moratorium on the export of reprocessing technology. 152 In 1977, President Carter indefinitely deferred domestic efforts at reprocessing and continued the export embargo. 153 Although President Reagan reversed the ban on domestic reprocessing in 1981, 154 the nuclear industry has not taken the opportunity to invest in the technology. In 2006, the George W. Bush Administration proposed a Global Nuclear Energy Partner ship (“GNEP”) for expanded worldwide nuclear power production. 155 As a key component of the GNEP proposal, the United States would provide other nations with a reliable supply of nuclear fuel, and it would take back the spent fuel for reprocessing at a commercial facility in the United States, thus avoiding the spread of reprocessing technology. 156 However, the Obama Administration substantially curtailed GNEP in 2009, and is “no longer pursuing domestic commercial reprocessing.” 157

### Observation 2

#### Observation Two: Waste

#### In the short term US nuclear waste is stored on-site.

Galbraith 11 (Kate, Staff Writer, “A New Urgency to the Problem of Storing Nuclear Waste”, New York Times, 11-27-11, http://www.nytimes.com/2011/11/28/business/energy-environment/a-new-urgency-to-the-problem-of-storing-nuclear-waste.html, RSR)

Other countries are also looking at waste in new ways in the post-Fukushima world. Right now, worldwide, most spent fuel waste is stored on the site of the facility that produced it, in spent-fuel pools and, after it eventually cools, dry casks. Experts say dispersed storage is expensive and that central storage would be more secure. Few countries , apart from Sweden and Finland, have moved forward on centralized disposal sites, deep in the earth, designed to hold the waste permanently. France is evaluating a permanent disposal site for spent fuel , near the remote northeastern village of Bure.

#### On-site storage is dangerous – storage pools are vulnerable to accidents.

Alvarez 12 (Robert, Senior Scholar at IPS, where he is currently focused on nuclear disarmament, environmental, and energy policies, “Improving Spent-Fuel Storage at Nuclear Reactors”, Winter, ISSUES IN SCIENCE AND TECHNOLOGY, RSR)

Until the NAS completes its study, if it agrees to do so, the bulk of current attention is focused on the NRC’s analysis of the Fukushima disaster. As in Japan, U.S. spent-fuel pools are not required to have defense-in-depth nuclear safety features. They are not covered by the types of heavy containment structures that cover reactor vessels. Reactor operators are not required have backup power supplies to circulate water in the pools and keep them cool in the event of onsite power failures. Reactor control rooms rarely have instrumentation keeping track of the pools’ water levels and chemistry. (In one incident at a U.S. reactor, water levels dropped to a potentially dangerous level after operators simply failed to look into the pool area.) Some reactors may not have the necessary capabilities to restore water to pools when needed. Quite simply, spent-fuel pools at nuclear reactors are not required to have the same level of nuclear safety protection as required for reactors, because the assumption was that they would be used only for short-term storage before the rods were removed for reprocessing or permanent storage. In its interim report, the NRC task force recognized these shortcomings and recommended that the NRC order reactor operators to: • “. . . provide sufficient safety-related instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters (i.e., water level, temperature, and area radiation levels) from the control room.” • “. . . revise their technical specifications to address requirements to have one train of onsite emergency electrical power operable for spent fuel pool makeup and spent fuel pool instrumentation when there is irradiated fuel in the spent fuel pool, regardless of the operational mode of the reactor.” • “. . . have an installed seismically qualified means to spray water into the spent fuel pools, including an easily accessible connection to supply the water (e.g., using a portable pump or pumper truck) at grade outside the building.” Improving pool safety is certainly important. For decades, nuclear safety research has consistently pointed out that severe accidents could occur at spent-fuel pools that would result in catastrophic consequences. A severe pool fire could render about 188 square miles around the nuclear reactor uninhabitable, cause as many as 28,000 cancer fatalities, and cause $59 billion in damage, according to a 1997 report for the NRC by Brookhaven National Laboratory. If the fuel were exposed to air and steam, the zirconium cladding around the fuel would react exothermically, catching fire at about 800 degrees Celsius. Particularly worrisome are the large amounts of cesium-137 in spent-fuel pools, because nearly all of this dangerous isotope would be released into the environment in a fire, according to the NRC. Although it is too early to know the full extent of long-term land contamination from the accident at the Dai-Ichi station, fragmentary evidence has been reported of high cesium-137 levels as far away as metropolitan Tokyo. The NRC also has reported that spent-fuel fragments were found a mile away from the reactor site. The damage from a large release of fission products, particularly cesium-137, was demonstrated at Chernobyl. More than 100,000 residents from 187 settlements were permanently evacuated because of contamination by cesium-137. The total area of this radiation-control zone is huge: more than 6,000 square miles, equal to roughly two-thirds the area of New Jersey. During the following decade, the population of this area declined by almost half because of migration to areas of lower contamination.

#### The densely packed fuel is enough to trigger a full scaled meltdown – Fukushima proves.

Kinitisch 11 (Eli, Reporter at Science Magazine, “Waste Panel Expected To Back Interim Storage”, Science Magazine, Vol. 333, 7-8-11, RSR)

In any case, experts agree, some new plan for waste storage is essential. Waste currently stored in pools and casks at U.S. sites does not pose “unmanageable … safety or security risks,” says a subcommittee report. But every ton that stays at reactor sites makes those risks slightly greater. Fuel in U.S. spent fuel pools is packed four times as densely as it was 25 years ago, raising concerns about the risk of explosions or meltdown if the pools were to empty in an accident. The tsunami that devastated the Fukushima nuclear plant in Japan in March may have resulted in a loss of water in one of its ponds (Science, 1 April, p. 24). A draft commission report says the issue of the safety of keeping fuel densely packed in pools should be “reexamined,” although “it is still too early to draw deﬁ nitive conclusions” from the Fukushima accident. It calls for an expert panel at the National Academies to tackle the subject.

#### These catastrophic meltdowns cause extinction – reactors contain 100x the radiation of nuclear bombs.

Lendman 11 (Stephen, Research Associate of the Centre for Research on Globalization,

03/ 13, “Nuclear Meltdown in Japan,”, The People’s Voice <http://www.thepeoplesvoice.org/TPV3/Voices.php/2011/03/13/nuclear-meltdown-in-japan>, accessed 8-2-12, RSR)

Reuters said the 1995 Kobe quake caused $100 billion in damage, up to then the most costly ever natural disaster. This time, from quake and tsunami damage alone, that figure will be dwarfed. Moreover, **under a worst case** core **meltdown, all bets are off as the entire region and beyond will be threatened with permanent contamination**, making the most affected areas unsafe to live in. On March 12, Stratfor Global Intelligence issued a "Red Alert: Nuclear Meltdown at Quake-Damaged Japanese Plant," saying: Fukushima Daiichi "nuclear power plant in Okuma, Japan, appears to have caused a reactor meltdown." Stratfor downplayed its seriousness, adding that such an event "does not necessarily mean a nuclear disaster," that already may have happened - the ultimate nightmare short of nuclear winter. According to Stratfor, "(A)s long as the reactor core, which is specifically designed to contain high levels of heat, pressure and radiation, remains intact, the melted fuel can be dealt with. If the (core's) breached but the containment facility built around (it) remains intact, the melted fuel can be....entombed within specialized concrete" as at Chernobyl in 1986. In fact, that disaster killed nearly one million people worldwide from nuclear radiation exposure. In their book titled, "Chernobyl: Consequences of the Catastrophe for People and the Environment," Alexey Yablokov, Vassily Nesterenko and Alexey Nesterenko said: "For the past 23 years, it has been clear that there is a danger greater than nuclear weapons concealed within nuclear power. **Emissions from** this **one reactor** exceeded a hundred**-fold the radioactive contamination of** the bombs dropped on **Hiroshima and Nagasaki.**" "**No** citizen of any **country** can be assured that he or she **can be protected from radioactive contamination. One nuclear reactor can pollute half the globe.** Chernobyl fallout covers the entire Northern Hemisphere." Stratfor explained that if Fukushima's floor cracked, "it is highly likely that the melting fuel will burn through (its) containment system and enter the ground. This has never happened before," at least not reported. If now occurring, "containment goes from being merely dangerous, time consuming and expensive to nearly impossible," making the quake, aftershocks, and tsunamis seem mild by comparison. Potentially, millions of lives will be jeopardized. Japanese officials said Fukushima's reactor container wasn't breached. Stratfor and others said it was, making the potential calamity far worse than reported. Japan's Nuclear and Industrial Safety Agency (NISA) said the explosion at Fukushima's Saiichi No. 1 facility could only have been caused by a core meltdown. In fact, 3 or more reactors are affected or at risk. Events are fluid and developing, but remain very serious. The possibility of an extreme catastrophe can't be discounted. Moreover, independent nuclear safety analyst John Large told Al Jazeera that by venting radioactive steam from the inner reactor to the outer dome, a reaction may have occurred, causing the explosion. "When I look at the size of the explosion," he said, "it is my opinion that there could be a very large leak (because) fuel continues to generate heat." Already, Fukushima way exceeds Three Mile Island that experienced a partial core meltdown in Unit 2. Finally it was brought under control, but coverup and denial concealed full details until much later. According to anti-nuclear activist Harvey Wasserman, Japan's quake fallout may cause nuclear disaster, saying: "This is a very serious situation. **If the cooling system fails** (apparently it has at two or more plants), the super-heated **radioactive fuel rods will melt**, and (if so) you could conceivably have an explosion," that, in fact, occurred. As a result, **massive radiation releases may follow**, impacting the entire region. "**It could be**, literally, **an apocalyptic event.**

#### On-site waste storage is the EASIEST target for a terrorist attack – it’s the most vulnerable.

Rogers 6 (Ken, Professor and Chair of the Political Science Department at Coastal Carolina University, “Radioactive Waste Storage/Disposal Policy: A Paradigm for Homeland Security and Energy Security”, Midsouth Political Science Review, 2006, Vol. 8, RSR)

The inability of U.S. policymakers to come to grips with the problem of what to do with the continued generation of radioactive waste has both homeland security and energy security implications. Clearly, the events of 9/11 have focused attention on the potential for a terrorist attack on nuclear facilities. While much of this concern has been directed towards an attack on the reactors themselves, the radioactive waste stored on-site – especially the waste stored outdoors above ground in dry casks – is more problematic since it is far more vulnerable to any terrorist assault. Thus, the major terrorist threat to nuclear power facilities is not to the reactors, but the radioactive waste that they generate.

#### On site storage vulnerable to terrorist theft – fewer security measures due to assumed radioactive safeguards.

Bunn 9 (Matthew, Associate Professor at Harvard University's John F. Kennedy School of Government, “Reducing the greatest risks of nuclear theft & terrorism”, Daedalus, American Academy of Arts and Sciences, Fall, RSR)

A building with nuclear material that terrorists could readily make into a nuclear bomb needs more security than a building with lower-quality material that would be very difficult for adversaries to use to make a bomb. But this sensible “graded safeguards” approach, used in national regulations and international recommendations around the world, must avoid slipping into what might be called “cliffed safeguards,” in which security falls off catastrophically if nuclear material is beyond some arbitrary threshold that has little relation to real risk. For example, under current Nuclear Regulatory Commission (nrc) rules in the United States, nuclear material that would normally require security measures costing millions of dollars a year requires none of that if it is radioactive enough to cause a radiation dose of one Sievert per hour at one meter– a level considered radioactive enough to make the material “self-protecting.” But studies at the national laboratories have shown that at this level of radiation, thieves who carried the material out to a waiting truck with their bare hands would not even receive a big enough dose of radiation to make them feel sick. In a world of suicidal terrorists, these rules–and similar, though less extreme, international rules– urgently need to be revised. More broadly, in-depth assessments of how different chemical, physical, isotopic, and radiological properties of a material affect the odds that adversaries would succeed in making a bomb from it should be used to determine how much security can be relaxed for particular types of material while keeping overall risks low. In making these assessments, it is important to remember that heu at enrichment levels far below the 90 percent U-235 level considered “weapons grade” can still readily be used in a bomb, at the cost of using somewhat more material. So past policies that have focused cooperative security upgrades only on sites whose heu is at least 80 percent U-235 should certainly be revised. Similarly, while weapons designers prefer weapons-grade plutonium, produced specifically to contain 90 percent or more Pu-239, the “reactor grade” plutonium produced in the spent fuel from typical power reactors can also be used to make fearsome explosives, despite the extra neutrons, heat, and radiation generated by the less desirable plutonium isotopes it contains. Indeed, repeated government studies have concluded that any state or group capable of making a bomb from weapons-grade plutonium would also be able to make a bomb from reactor-grade plutonium. 6

#### Nuclear terrorism is likely and causes extinction – security experts agree.

Rhodes 9 (Richard, affiliate of the Center for International Security and Cooperation at Stanford University, Former visiting scholar at Harvard and MIT, and author of “The Making of the Atomic Bomb” which won the Pulitzer Prize in Nonfiction, National Book Award, and National Book Critics Circle Award, “Reducing the nuclear threat: The argument for public safety” 12-14, <http://www.thebulletin.org/web-edition/op-eds/reducing-the-nuclear-threat-the-argument-public-safety>, RSR)

The response was very different among nuclear and national security experts when Indiana Republican Sen. Richard Lugar surveyed PDF them in 2005. This group of 85 experts judged that the possibility of a WMD attack against a city or other target somewhere in the world is real and increasing over time. The median estimate of the risk of a nuclear attack somewhere in the world by 2010 was 10 percent. The risk of an attack by 2015 doubled to 20 percent median. There was strong, though not universal, agreement that a nuclear attack is more likely to be carried out by a terrorist organization than by a government. The group was split 45 to 55 percent on whether terrorists were more likely to obtain an intact working nuclear weapon or manufacture one after obtaining weapon-grade nuclear material. "The proliferation of weapons of mass destruction is not just a security problem," Lugar wrote in the report's introduction. "It is the economic dilemma and the moral challenge of the current age. On September 11, 2001, the world witnessed the destructive potential of international terrorism. But the September 11 attacks do not come close to approximating the destruction that would be unleashed by a nuclear weapon. Weapons of mass destruction have made it possible for a small nation, or even a sub-national group, to kill as many innocent people in a day as national armies killed in months of fighting during World War II. "The bottom line is this," Lugar concluded: "For the foreseeable future, the United States and other nations will face an existential threat from the intersection of terrorism and weapons of mass destruction." It's paradoxical that a diminished threat of a superpower nuclear exchange should somehow have resulted in a world where the danger of at least a single nuclear explosion in a major city has increased (and that city is as likely, or likelier, to be Moscow as it is to be Washington or New York). We tend to think that a terrorist nuclear attack would lead us to drive for the elimination of nuclear weapons. I think the opposite case is at least equally likely: A terrorist nuclear attack would almost certainly be followed by a retaliatory nuclear strike on whatever country we believed to be sheltering the perpetrators. That response would surely initiate a new round of nuclear armament and rearmament in the name of deterrence, however illogical. Think of how much 9/11 frightened us; think of how desperate our leaders were to prevent any further such attacks; think of the fact that we invaded and occupied a country, Iraq, that had nothing to do with those attacks in the name of sending a message.

#### In the long term, waste will be stored at Yucca – only option.

Tollefson 11 (Jeff, former Knight fellow in science journalism at MIT, “Battle of Yucca Mountain rages on”, Nature, Vol. 473, No. 266, 5-19-11, RSR)

The commission intends to issue a draft report in July and a final one next January. With its recommendations in hand, the administration is expected to propose legislation that would establish a new process for identifying nuclear waste storage sites. Yet such a process could well take decades, the GAO report concludes, and the government’s reversal at Yucca Mountain could serve to galvanize public opposition at other candidate sites. Since the debate began, “no states have expressed an interest in hosting a permanent repository for this spent nuclear fuel ... including the states with sites currently storing the waste”, the report adds. The commission’s scheme for an interim storage facility may prove no more appealing, given fears that ‘interim’ means permanent as long as the present impasse continues. Such fears have in the past halted interim storage proposals in states such as Wyoming. And even if one community decides that it is willing to play host to the waste, that doesn’t mean others won’t challenge nuclear-waste transportation routes. Nevertheless, the nation will need to find a permanent repository at some point, and Yucca Mountain, it seems, is down but not out. “Yucca Mountain has nine lives,” says Ed Davis, a nuclear consultant who heads the Pegasus Group in Washington DC. “And nobody knows how many lives have been used up.”

#### Yucca explosion is likely - earthquakes, volcanoes, and ground water

Warrick 98 (Joby, Staff, At Nevada Nuclear Waste Site, The Issue Is One of Liquidity; Studies Citing Risk of Water Seepage Imperil Yucca Mountain Project, The Washington Post, December 15, p. A3)

More recent studies raised different kinds of concerns. A report in March by the California Institute of Technology found new evidence of geological instability in the region, including relatively rapid shifting of the Earth's crust near the mountain. The movement raises the probability of future earthquakes or volcanic eruptions.¶ And last week, a Russian geologist claimed that hot water from deep underground had flooded the mountain at least once in the geologically recent past. Yuri V. Dublyansky, of the Siberian branch of the Russian Academy of Sciences, said flooding could happen again, with potentially calamitous results.¶ "We can be reasonably sure that Yucca Mountain was at some point in the past saturated with water. The crucial question is when," said Dublyansky, who obtained rock samples from inside the mountain while working for Nevada state officials who hope to defeat the project. "Any decision on whether Yucca Mountain should be a repository for nuclear waste should be preceded by a resolution of that question."¶ The evidence of past flooding comes from crystals of calcite and other minerals that were formed when the mountain was already old, said Dublyansky, now a research fellow for the Maryland-based Institute for Energy and Environmental Research. Microscopic bubbles inside the rocks, known as "fluid inclusions," prove that the crystals were formed in the presence of hot water -- which could only have come from underground thermal springs, Dublyansky said.¶ At his request, the findings were reviewed by independent scientists from Austria, Great Britain and Nevada -- all of whom backed his basic conclusions. But U.S. government scientists ridiculed Dublyansky's research as unscholarly. "We are disturbed," said Joe Whelan of the U.S. Geological Survey in a written critique, "by Dr. Dublyansky's shrewd and nonscientific arguments that seem to be crafted for readers unfamiliar with the specific Yucca Mountain geologic relations."¶ Szymanski, the former Energy Department geologist, also had argued that a thermal upwelling had occurred at Yucca Mountain and sees the new evidence as vindication. He thinks a combination of water and the red-hot temperatures of the nuclear waste casks could spark an explosion that could spew lethal doses of radiation into the atmosphere.¶ "This is direct evidence," Szymanski said. "And if anybody doubts the results, they can go back and measure them again. They're very easy to verify."

#### Yucca explosion results in extinction – top geologists agree.

Broad 90 (William, NYT Staff, The New York Times, November 18)

One scientist, however, has quietly but persistently warned that this vision of a safe repository is little more than a delusion.¶ Jerry S. Szymanski (pronounced sha-MAN-ski) is a geologist who works on the Yucca Mountain project for the United States Department of Energy, which is in charge of evaluating the site and would run the repository. For years, he has argued that ground water under the mountain could eventually well up, flood the facility and prompt a calamity of vast proportions. The geological action is easy to visualize. Crustal stresses in the area slowly open fractures and faults under and within the mountain. Water seeps into them. An earthquake occurs, compressing the fractures and forcing the ground water upward into the dump. As the inrushing water comes into contact with the hot canisters of nuclear waste, the water is vaporized, threatening to cause explosions, ruptures and the release of radioactivity.¶ Szymanski has worked for the D.O.E. since 1983. He takes pains to distance himself from foes of nuclear power. "This report is not the act of a disgruntled employee or an antinuclear freak," he wrote in the preface of a study he made on Yucca Mountain. "Rather, it is the act of a deeply concerned scientist, a public servant and a pro-nuclear activist."¶ He chain-smokes Winstons and drinks Scotch, neither of which seems to impair his ability to take brisk hikes up the mountain with his dog Max, a fierce-looking but friendly creature that is half Labrador, half pit bull. Szymanski's eyes flash when he speaks of those who oppose his view of the evidence. "It's banality of thought," he growls, "absence of depth." That same kind of banality, he says, was responsible for the Holocaust, around which his earliest memories revolve, and for a brutal crackdown in his native Poland, which prompted him to flee that country two decades ago with his wife and 6-month-old son. Today, he says, banality is prompting the Federal Government to court disaster.¶ Squinting in the bright Nevada sunlight, a cigarette firmly in his mouth, Szymanski walks into Trench No. 8, a deep scar on the side of Yucca Mountain dug at the behest of the Energy Department. It runs across a fault. He bends down to examine a one-yard-wide vein of rock whose creamy color stands in contrast to the dark, surrounding earth tones. His fingers play over its surface. The vein was deposited, he says, by mineral-laden water that welled up and turned this desolate site into an oasis.¶ "This is above the repository level," he says with studied understatement. The implication is clear and troubling -- where water once flowed, it might flow again.¶ The repository would hold up to 70,000 metric tons of waste. A large release would have an environmental impact that, by some estimates, would exceed that of a nuclear war. For perspective, the explosion of the Chernobyl reactor in the Soviet Union shot into the atmosphere just a few dozen pounds of highly radioactive nuclear waste, one of the most dangerous components of which was cesium 137 (it would also be a significant part of the waste at Yucca Mountain). Various studies say the consequences of Chernobyl will eventually be somewhere between 17,000 and 475,000 deaths from cancer, as well as an alarming number of serious ailments.¶ For half a decade, Szymanski's was a lone voice. His grim appraisal was opposed by almost everyone else on the Yucca Mountain project, who let their displeasure be known in subtle and not-so-subtle ways. But recently, growing ranks of geologists have backed his view. The dispute is by no means resolved.¶ If Szymanski is right and his warnings are heeded, it could mark the end of the Yucca Mountain project. The retreat would be a stunning setback for the Government and the nuclear-power industry, which is poised for a revival. If he is right and his warnings go unheeded, some experts say it might be the beginning of the ultimate end.¶ "You flood that thing and you could blow the top off the mountain," says Charles B. Archambeau, a geophysicist at the University of Colorado who has reviewed Szymanski's work and found it persuasive. "At the very least, the radioactive material would go into the ground water and spread to Death Valley, where there are hot springs all over the place, constantly bringing water up from great depths. It would be picked up by the birds, the animals, the plant life. It would start creeping out of Death Valley. You couldn't stop it. That's the nightmare. It could slowly spread to the whole biosphere. If you want to envision the end of the world, that's it."

#### Reprocessing would remove the waste problem – the waste we currently store can be reused

Bastin 8 (Clinton, Former Chemical Engineer at the Atomic Energy Commission, 21st Century Science and Technology, “We Need to Reprocess Spent Nuclear Fuel, And Can Do It Safely, At Reasonable Cost”, 2008, [http://www.21stcenturysciencetech.com/Articles%202008/ Summer\_2008/Reprocessing.pdf](http://www.21stcenturysciencetech.com/Articles%202008/Summer_2008/Reprocessing.pdf), RSR)

The concept of used nuclear fuel as “nuclear waste” is a fiction created by the opponents of nuclear energy. Used nuclear fuel isn’t waste at all, but a renewable resource that can be reprocessed into new nuclear fuel and valuable isotopes. When we entered the nuclear age, the great promise of nuclear energy wasitsrenewability, making it an inexpensive and efficient way to produce electricity. It was assumed that the nations making use of nuclear energy would reprocess their spent fuel, completing the nuclear fuel cycle by recycling the nuclear fuel after it was burned in a reactor, to extract the 95 to 99 percent of unused uranium in it that can be turned into new fuel. This means that if the United States buries its 70,000 metric tons of spent nuclear fuel, we would be wasting 66,000 metric tons of uranium-28, which could be used to make new fuel. In addition, we would be wasting about 1,200 metric tons of fissile uranium-25 and plutonium-29, which can also be burned as fuel. Because of the high energy density in the nucleus, this relatively small amount of U.S. spent fuel (it would fit in one small house) is equivalent in energy to about 20 percent of the U.S. oil reserves. About 96 percent of the spent fuel the United States is now storing can be turned into new fuel. The 4 percent of the socalled waste that remains—2,500 metric tons—consists of highly radioactive materials, but these are also usable. There are about 80 tons each of cesium-17 and strontium-90 that could be separated out for use in medical applications, such as sterilization of medical supplies. Using isotope separation techniques, and fast-neutron bombardment for transmutation (technologies that the United States pioneered but now refuses to develop), we could separate out all sorts of isotopes, like americium, which is used in smoke detectors, or isotopes used in medical testing and treatment. Right now, the United Statesmust import 90 percent of its medical isotopes, used in 40,000 medical procedures daily. The diagram shows a closed nuclear fuel cycle. At present, the United States has no reprocessing, and stores spent fuel in pools or dry storage at nuclear plants. Existing nuclear reactors use only about 1 percent of the total energy value in uranium resources; fast reactors with fuel recycle would use essentially 100 percent, burning up all of the uranium and actinides, the long-lived fission products. In a properly managed and safeguarded system, the plutonium produced in fast reactors would remain in its spent fuel until needed for recycle.Thus, there need be no excess buildup of accessible plutonium. The plutonium could also be fabricated directly into new reactor fuel assemblies to be burned in nuclear plants.

#### Reprocessing solves the blow up of Yucca Mountain.

Broad 95 (William, NYT staff, Scientists fear atomic explosion of buried waste, The New York Times, March 5, p. 1)

Dr. Bowman says the explosion thesis is alive and well. On Friday he finished an 11-page draft paper thick with graphs and equations that lays it out in new detail.¶ The team criticisms, he said in an interview, repeatedly fall flat. For instance, dispersal could happen relatively quickly, especially if water percolated through the dump. Even if slow, plutonium 239 decays into uranium 235, which harbors the same explosive risks but requires millions of years to decay into less dangerous elements.¶ So too with the other criticisms, he says. Water could aid the slowing of neutrons and make sure the reaction went forward rather than automatically slowing down. And a pile could explode, he insists, while conceding that the blast from a single one might have a force of a few hundred tons of high explosive rather than the thousand or more originally envisioned.¶ On the other hand, his new paper says plutonium in amounts as small as one kilogram, or 2.2 pounds, could be dangerous.¶ "We got some helpful criticism and that, combined with additional work, has made our thesis even stronger," he said.¶ The most basic solution, Dr. Bowman said, would be removing all fissionable material from nuclear waste in a process known as reprocessing or by transmuting it in his proposed accelerator. Other possible steps would include making steel canisters smaller and spreading them out over larger areas in underground galleries -- expensive steps in a project already expected to cost $15 billion or more.¶ A different precaution, Dr. Bowman said, would be to abandon the Yucca site, where the volcanic ground is relatively soluble. Instead, the deep repository might be dug in granite, where migration of materials would be slower and more difficult.

### Observation 3

#### Observation Three: Peak uranium

#### Peak uranium is coming by 2016.

Keen 12 (Kip, Uranium supply crunch by 2016 - nuclear expert says, Mineweb, 24 January 2012, http://www.mineweb.co.za/mineweb/view/mineweb/en/page72103?oid=143915&sn=Detail&pid=102055, da 8-27-12)

A nuclear expert gave uranium supply three more years - at most - before it seriously falls behind demand from the nuclear power industry.¶ "2016: We have to have supply in the market or the lights will gradually go out in the nuclear system," said Thomas Drolet, the president of Drolet & Associates Energy Services, during a presentation at Cambridge House's Vancouver Resource Investment conference on Monday.¶ A uranium supply crunch is widely anticipated to hit the nuclear industry starting next year as Cold War era sources of uranium dry up. To illustrate the severity of the shortage that the nuclear industry faces, Drolet highlighted 2010 uranium production from mining - 118 million pounds - versus consumption: 190 million pounds.¶ "You can do the delta difference yourself," Drolet said, referring to how much of a supply gap miners will have to make up for in coming years. ¶ That uranium is "going to have to come from somewhere," he said.¶ The Fukushima nuclear disaster in Japan, Drolet argued, only delayed the onset of the coming pinch on uranium supply. But even in his "downside" analysis the uranium deficit still comes by 2015.

#### And, domestic shortages of uranium are creating a supply problem for tritium production.

Holt and Nikitin 12 (Mark Holt (specialist in energy policy) and Mary Beth (specialist in nuclear nonproliferation), “Potential sources of nuclear fuel for tritium production”, CRS, 5-15-2012, <http://markey.house.gov/sites/markey.house.gov/files/documents/2012_0515_CRS_TritiumFuelOptions.pdf>)

Watts Bar 1 is refueled every 18 months, when about a third of its fuel is replaced. A load of replacement fuel contains about 30 metric tons of low-enriched uranium (LEU). If the Sequoyah plant were also used for tritium production, fuel requirements would double or triple. The National Nuclear Security Administration (NNSA), the DOE agency that runs the tritium program, is currently evaluating options for providing fuel for the tritium-production reactors. According to NNSAPs 2011 Stockpile Stewardship report, There is a potential strategic shortage in LEU. Therefore, the DOE/NNSA is pursuing identification of a source of 940 metric tons of unrestricted LEU or 1,800 metric tons for two reactors, for the life of the Tennessee Valley Authority (2048) agreement. The Stockpile Stewardship report classifies the fuel supply issue as green, indicating that existing and/or future capacity [is] estimated to be sufficient under current assumptions. 1 Therefore, although NNSA has flagged nuclear fuel supply as a potential problem, it appears optimistic that a solution can be found.

#### That’s key to the nuclear deterrent.

Gaffney 10 (Frank, founder and president of the Center for Security Policy, “There Goes the Nuclear Deterrent”, Breitbart, 10-14-2010, <http://www.breitbart.com/Big-Peace/2010/10/14/There-Goes-the-Nuclear-Deterrent>)

The House Armed Services Committee warned in 1993 that the deterrent was being subjected to “erosion by design” – and thanks to these sorts of deliberate actions – those chickens are coming home to roost today, with a vengeance. ¶ Now, we learn that the stockpile is literally running out of gas. ¶ A key ingredient used to boost the explosive power of thermonuclear devices is a gas called tritium. Unlike other radioactive materials used in such weapons (notably, plutonium and uranium), the usefulness of tritium degrades fairly quickly – its “half-life” is only about 12 years. As a result, the tritium reservoirs in our bombs and missile warheads must be regularly refueled in order for those weapons to remain operable.

#### Nuclear deterrence necessary to deter rogue states, CBW attacks, power challengers, and allied proliferation - impact is extinction.

Schneider 9 (Mark, Senior Analyst with the National Institute for Public Policy, May/April 2009 “The Future of the US Nuclear Deterrent” Comparative Strategy, p345-360)

According to the Pentagon’s Quadrennial Defense Review, the United States must maintain a “robust nuclear deterrent, which remains a keystone of U.S. national power.”98 The reason should be self evident—without a nuclear deterrent the United States could be destroyed as an industrial civilization and our conventional forces could be defeated by a state with grossly inferior conventional capability but powerful WMD. We cannot afford to ignore existing and growing threats to the very existence of the United States as a national entity. Missile defenses and conventional strike capabilities, while critically important elements of deterrence and national power, simply can’t substitute for nuclear deterrence. In light of the emerging “strategic partnership” between Russia and China and their emphasis on nuclear weapons it would be foolish indeed to size U.S. strategic nuclear forces as if the only threat we face is that of rogue states and discard the requirement that the U.S. nuclear deterrent be “second to none.” Ignoring the PRC nuclear threat because of Chinese “no first use” propaganda is just as irresponsible. Absent a nuclear deterrent to their WMD use, rogue states could defeat our forces by the combination of few nuclear EMP weapons and large chemical and biological attacks. The situation would be much worse if they build a more extensive nuclear strike capability as has been reported. Freezing U.S. nuclear forces at the technical level of the Reagan administration will assure that, within two decades, Russia, China, India, and probably others will be technically superior and U.S. deterrence ability against CBW attack will be reduced. United States nuclear forces must be modernized and tailored to enhance deterrence and damage limitation against the rogue WMD threat. WMD capabilities have given otherwise inconsequential states the ability to kill millions of people. The right combination of missile defense and conventional and nuclear strike capabilities provide the best deterrent and damage limiting capability against the rogue state threat. We must not ignore the requirement to provide extended deterrence to our allies. British and French nuclear forces are not large enough, and these nations are not perceived as tough enough, to provide a deterrent for NATO Europe against Russia. In the Far East, there is literally no nuclear deterrent capability against China other than that provided by the United States. Failure to provide a credible deterrent will result in a wave of nuclear proliferation with serious national security implications. When dealing with the rogue states, the issue is not the size of the U.S. nuclear deterrent but the credibility of its use in response to chemical or biological weapons use and its ability to conduct low collateral damage nuclear attacks against WMD capabilities and delivery systems including very hard underground facilities for purposes of damage limitation. We must also have the capability to respond promptly. The United States nuclear guarantee is a major deterrent to proliferation. If we do not honor that guarantee, or devalue it, many more nations will obtain nuclear weapons. If arms control really becomes a substitute for nuclear deterrence and defense, it may very well precipitate the most destructive war in history. Effective verification is essentially impossible, and verification is not a substitute for compliance. Today, arms control has become part of the problem rather than a solution to the problem. The abolition of the in-kind deterrent to CBW use—which deterred CBW use in World War II—is making the world more unsafe almost on a daily basis. The START and Intermediate-Range Nuclear Forces (INF) Treaties prevent or inhibit the development of conventional strike capabilities with enhanced ability to counter WMD. The demise of the ABM Treaty, while very useful, does not completely address the problem of legacy arms control and its constraints upon U.S. conventional capabilities.

#### Shorter flight times and lack of second strike capacity make miscalculation more likely.

Cimbala 8 (Stephen, Political Science Professor at the University of Pennsylvania, March, “Anticipatory Attacks: Nuclear Crisis Stability in Future Asia” Comparative Strategy, Vol 27 No 2, p 113-132, InformaWorld)

The spread of nuclear weapons in Asia presents a complicated mosaic of possibilities in this regard. States with nuclear forces of variable force structure, operational experience, and command-control systems will be thrown into a matrix of complex political, social, and cultural crosscurrents contributory to the possibility of war. In addition to the existing nuclear powers in Asia, others may seek nuclear weapons if they feel threatened by regional rivals or hostile alliances. Containment of nuclear proliferation in Asia is a desirable political objective for all of the obvious reasons. Nevertheless, the present century is unlikely to see the nuclear hesitancy or risk aversion that marked the Cold War, in part, because the military and political discipline imposed by the Cold War superpowers no longer exists, but also because states in Asia have new aspirations for regional or global respect.12 The spread of ballistic missiles and other nuclear-capable delivery systems in Asia , or in the Middle East with reach into Asia, is especially dangerous because plausible adversaries live close together and are already engaged in ongoing disputes about territory or other issues.13 The Cold War Americans and Soviets required missiles and airborne delivery systems of intercontinental range to strike at one another's vitals. But short-range ballistic missiles or fighter-bombers suffice for India and Pakistan to launch attacks at one another with potentially “strategic” effects. China shares borders with Russia, North Korea, India, and Pakistan; Russia, with China and North Korea; India, with Pakistan and China; Pakistan, with India and China; and so on. The short flight times of ballistic missiles between the cities or military forces of contiguous states means that very little time will be available for warning and attack assessment by the defender. Conventionally armed missiles could easily be mistaken for a tactical nuclear first use. Fighter-bombers appearing over the horizon could just as easily be carrying nuclear weapons as conventional ordnance. In addition to the challenges posed by shorter flight times and uncertain weapons loads, potential victims of nuclear attack in Asia may also have first strike-vulnerable forces and command-control systems that increase decision pressures for rapid, and possibly mistaken, retaliation. This potpourri of possibilities challenges conventional wisdom about nuclear deterrence and proliferation on the part of policymakers and academic theorists. For policymakers in the United States and NATO, spreading nuclear and other weapons of mass destruction in Asia could profoundly shift the geopolitics of mass destruction from a European center of gravity (in the twentieth century) to an Asian and/or Middle Eastern center of gravity (in the present century).14 This would profoundly shake up prognostications to the effect that wars of mass destruction are now passe, on account of the emergence of the “Revolution in Military Affairs” and its encouragement of information-based warfare.15 Together with this, there has emerged the argument that large-scale wars between states or coalitions of states, as opposed to varieties of unconventional warfare and failed states, are exceptional and potentially obsolete.16 The spread of WMD and ballistic missiles in Asia could overturn these expectations for the obsolescence or marginalization of major interstate warfare. For theorists, the argument that the spread of nuclear weapons might be fully compatible with international stability, and perhaps even supportive of international security, may be less sustainable than hitherto.17 Theorists optimistic about the ability of the international order to accommodate the proliferation of nuclear weapons and delivery systems in the present century have made several plausible arguments based on international systems and deterrence theory. First, nuclear weapons may make states more risk averse as opposed to risk acceptant, with regard to brandishing military power in support of foreign policy objectives. Second, if states' nuclear forces are second-strike survivable, they contribute to reduced fears of surprise attack. Third, the motives of states with respect to the existing international order are crucial. Revisionists will seek to use nuclear weapons to overturn the existing balance of power; status quo-oriented states will use nuclear forces to support the existing distribution of power, and therefore, slow and peaceful change, as opposed to sudden and radical power transitions. These arguments, for a less alarmist view of nuclear proliferation, take comfort from the history of nuclear policy in the “first nuclear age,” roughly corresponding to the Cold War.18 Pessimists who predicted that some thirty or more states might have nuclear weapons by the end of the century were proved wrong. However, the Cold War is a dubious precedent for the control of nuclear weapons spread outside of Europe. The military and security agenda of the Cold War was dominated by the United States and the Soviet Union, especially with regard to nuclear weapons. Ideas about mutual deterrence based on second-strike capability and the deterrence “rationality” according to American or allied Western concepts might be inaccurate guides to the avoidance of war outside of Europe.19

#### Uranium scarcity causes Russia and China to compete for Kazakh uranium – hurts relations.

Muzalevsky 11 (Roman, International Affairs Expert, Global Struggle for Kazakh Uranium Resources, 15 April 2011, The Jamestown Foundation, http://www.jamestown.org/single/?no\_cache=1&tx\_ttnews%5Bswords%5D=8fd5893941d69d0be3f378576261ae3e&tx\_ttnews%5Bany\_of\_the\_words%5D=uranium&tx\_ttnews%5Btt\_news%5D=37802&tx\_ttnews%5BbackPid%5D=7&cHash=eff36581a33138a4b57613d1f285d205, da 9-13-12)

Kazakhstan is interested in profiting from its energy exports to diverse suppliers and strengthening its geopolitical position vis-à-vis its two large neighbors – Russia and China. A rapidly emerging China is a prospective partner for Kazakhstan, wary of Moscow’s economic interests and strategic imperatives to retain its great power status in the post-Soviet space.¶ Russia is the world’s third and fourth largest source and producer of uranium, respectively. However, it confronts major production difficulties due to geographic conditions, pushing it to seek uranium deals with countries such as Australia and Kazakhstan. Russia needs to produce about 20,000 tons of uranium annually to meet its nuclear power needs by 2025. In 2007, it produced 3,413 tons of uranium. After the launch of a joint Russian-Kazakh venture in Kazakhstan, Russia’s uranium production climbed to 3,527 tons. In 2006, the two countries agreed to launch three nuclear joint ventures worth $10 billion to develop, enrich, and build nuclear reactors, including with a view to construct nuclear power stations in Kazakhstan and other countries (www.newsru.com, June 26, 2008; www.thebulletin.org, April 28, 2008).¶ Kazakhstan relies on Russia, which enjoys 45 percent of the global uranium enrichment capacity, for uranium enrichment. However, Mukhtar Dzhakishev, the former executive of the Kazakh nuclear state company Kazatomprom, cautions against Kazakhstan’s overall cooperation with Russia (www.inosmi.ru, February 26, 2010).¶ Kazakhstan has tried to avoid this by collaborating with Japan and China. Technologically-strong Japan is expected to generate 41 percent of its electricity production from nuclear energy by 2017. It runs 55 nuclear power reactors, planning to construct 11 more in the future. This offers lucrative prospects for Kazakhstan as it wants to obtain a 40 percent share of Japan’s uranium market. Companies such as Marubeni, Tokyo Electric Power, Chubu Electric Power, and Tohoku Electric Power have already contracted with Kazatomprom to develop Kharasan-1 and Kharasan-2 uranium deposits in Kazakhstan, aiming to produce 160,000 tons of uranium by 2050. Kazatomprom and Japan’s Sumitomo Shoji and Kepko also develop the Zapadny Munkuduk uranium deposit in the country. Kazatomprom also has a 10 percent share of the Japanese-owned Westinghouse Electric, one of the world’s largest suppliers of nuclear power reactors. Astana and Tokyo are currently exploring the possibility of building a nuclear power station in Kazakhstan (EDM, August 2, 2010).¶ Kazakh-Chinese cooperation is especially notable. China, as a leading global nuclear power developer is already the largest buyer of Kazakh uranium (www.trend.az, November 11, 2010). In 2007, Kazatomprom and China Guangdong Nuclear Power Group agreed to produce nuclear fuel (www.thebulletin.org, April 28, 2008). In April 2009, China and Kazakhstan created the Semizbay-U enterprise at Irkol, planning to produce 750 tons of uranium annually (EDM, March 23). Deputy Head of State Energy Management of China, Tian Zhiming, commented on Beijing’s appetite for nuclear energy: “The PRC will become the world’s largest consumer of uranium by 2030, overtaking the US. It is a question of time.” In 2011, the two sides agreed on the supply of 55,000 tons of uranium over the next 10 years. “Nineteen nuclear complexes will be built in China and 25 more are being planned. This is a huge potential market. In the long term, Kazakhstan can supply up to 40 percent of nuclear fuel. This is tens of billions of dollars in profit,” stated Kazakh President Nursultan Nazarbayev (www.eurasia.org.ru, March 17). ¶ In this light, security risks associated with a struggle by major powers over access to Kazakh uranium resources are not inconceivable, making it imperative for Kazakhstan not to overplay its external balancing strategy as it seeks to consolidate its sovereignty and maintain an economic modernization drive. Kazakhstan must address domestic risks. Its ambitions to supply nuclear power and fuel at home and abroad already raise environmental, health, and proliferation concerns given the lack of a professional cadre and environmental and safety standards. Many people still suffer from more than 450 nuclear weapons tests conducted in the country during the Soviet era. Nuclear incidents in Japan after the recent tsunami and potential Russian-Kazakh plans to build a nuclear power plant in Aktau are already generating an anti-nuclear backlash in the country (EDM, March 23; www.thebulletin.org, April 28, 2008). Many fear that widespread corruption and the country’s location in an unstable region increases the risk that Kazakhstan might possibly become a major proliferator (www.newsland.ru, October 17, 2009; www.thebulletin.org, April 28, 2008).¶ ¶ Mitigating these risks is a major challenge for Kazakhstan and others as the world confronts the surge in nuclear energy demand and the struggle over the precious uranium resources.

#### That escalates to global nuclear war.

Blank 2k (Stephen J, Expert on the Soviet Bloc for the Strategic Studies Institute, “American Grand Strategy and the Transcaspian Region”, World Affairs. 9-22)

Thus many structural conditions for conventional war or protracted ethnic conflict where third parties intervene now exist in the Transcaucasus and Central Asia. The outbreak of violence by disaffected Islamic elements, the drug trade, the Chechen wars, and the unresolved ethnopolitical conflicts that dot the region, not to mention the undemocratic and unbalanced distribution of income across corrupt governments, provide plenty of tinder for future fires. Many Third World conflicts generated by local structural factors also have great potential for unintended escalation. Big powers often feel obliged to rescue their proxies and proteges. One or another big power may fail to grasp the stakes for the other side since interests here are not as clear as in Europe. Hence commitments involving the use of nuclear weapons or perhaps even conventional war to prevent defeat of a client are not well established or clear as in Europe. For instance, in 1993 Turkish noises about intervening on behalf of Azerbaijan induced Russian leaders to threaten a nuclear war in that case. Precisely because Turkey is a NATO ally but probably could not prevail in a long war against Russia, or if it could, would conceivably trigger a potential nuclear blow (not a small possibility given the erratic nature of Russia's declared nuclear strategies), the danger of major war is higher here than almost everywhere else in the CIS or the "arc of crisis" from the Balkans to China. As Richard Betts has observed, The greatest danger lies in areas where (1) the potential for serious instability is high; (2) both superpowers perceive vital interests; (3) neither recognizes that the other's perceived interest or commitment is as great as its own; (4) both have the capability to inject conventional forces; and (5) neither has willing proxies capable of settling the situation.(77)

#### And escalation’s guaranteed – it’s a geopolitical hub.

Saghal and Anand10 (Arun (former Army officer who created the Office of Net Assessment in the Indian Joint Staff, Senior Fellow at the Institute for Defense Studies and Analyses and ‘Distinguished Fellow’ School of Geo-Politics at the Manipal Academy of Higher Education) and Vinod (postgraduate in defence and strategic studies and is an alumnus of Defence Services Staff College and College of Defence Management), “Strategic Environment in Central Asia and India”, <http://www.silkroadstudies.org/new/docs/publications/1004Joshi-V-Strategic.pdf>)

The geo-strategic salience of Central Asia today has been underscored by two main factors. First, Central Asia has become important because of the discovery of hydrocarbon reserves and second, it has become a major transportation hub for gas and oil pipelines and multi-modal communication corridors connecting China, Russia, Europe, the Caucasus region, the Trans-Caspian region and the Indian Ocean. Furthermore, whether it was Czarist Russia or the Soviet Union or even the present Central Asian regimes, there has always been a strategic ambition in the north to seek access to the warm waters of the Indian Ocean. Thus Afghanistan, which links Central Asia and South Asia, is a strategic bridge of great geopolitical significance. Central Asia and South Asia are intimately connected not only geographically but also strategically. The Central Asian republics of Turkmenistan, Uzbekistan and Tajikistan have borders with Afghanistan, Iran lies to its west and Pakistan to the east and south. Therefore, the geostrategic significance of Afghanistan is enhanced even though it may not be an oil- or gas-rich country. With the control of Afghanistan comes the control of the land routes between the Indian subcontinent and resource-rich Central Asia, as well as of a potential corridor to Iran and the Middle East. Thus, stability and peace in Afghanistan, and for that matter Pakistan, are a geostrategic imperative. Central Asia has never been a monolithic area and is undergoing a turbulent transitional process with a diverse range of ethnicities and fragmented societies throughout the region. These societal divisions and lack of political maturity compound the social, economic and political challenges. Security and economic issues are the two most important components of the Central Asian states’ engagement with outside powers. Among the states themselves there are elements of both cooperation and competition. Historical legacies, their geo-strategic locations, and above all their perceived national interests profoundly influence the political choices of Central Asian nations. The weaknesses of the new nations in Central Asia pave the way for outside powers to interfere in their internal affairs.

#### Nuclear reprocessing could allow US reactors to run for 30 years without new uranium.

WNA 12 (Processing of Used Nuclear Fuel, World Nuclear Association, May 2012, http://www.world-nuclear.org/info/inf69.html, da 8-30-12)

Reprocessing used fuel to recover uranium (as reprocessed uranium, or RepU) and plutonium (Pu) avoids the wastage of a valuable resource. Most of it – about 96% – is uranium, of which less than 1% is the fissile U-235 (often 0.4-0.8%); and up to 1% is plutonium. Both can be recycled as fresh fuel, saving up to 30% of the natural uranium otherwise required. The materials potentially available for recycling (but locked up in stored used fuel) could conceivably run the US reactor fleet of about 100 GWe for almost 30 years with no new uranium input.¶ So far, almost 90,000 tonnes (of 290,000 t discharged) of used fuel from commercial power reactors has been reprocessed. Annual reprocessing capacity is now some 4000 tonnes per year for normal oxide fuels, but not all of it is operational.¶ Between now and 2030 some 400,000 tonnes of used fuel is expected to be generated worldwide, including 60,000 t in North America and 69,000 t in Europe.

#### US nuclear reprocessing lead to a spillover of the technology internationally.

Acton 9 (James, J. associate in the Nonproliferation Program at the Carnegie Endowment for International Peace, Survival, Vol. 51, No. 4, “Nuclear Power, Disarmament and Technological Restraint”, RSR)

Thus, not only does reprocessing clearly not help with facilitating take back, but if advanced nuclear states adopt it as a tool for waste management, it will be virtually impossible for them to argue against others doing likewise. Today, waste management is probably the most important driver for reprocessing. Indeed, the Bush administration’s interest in this technology was born out of a desire to stretch the capacity of Yucca Mountain as far as possible. If the United States and others reprocess they will hand a powerful argument to lobbies within a state – typically the nuclear R&D community – that support the development of reprocessing.

#### Nuclear reprocessing solves peak uranium internationally.

Berry and Tolley 10 (R. Stephen and George S., Professors at the University of Chicago, Nuclear Fuel Reprocessing: Future Prospects and Viability, University of Chicago, 29 November 2010, http://humanities.uchicago.edu/orgs/institute/bigproblems/Team7-1210.pdf, da 8-29-12)

Uranium prices have also been rising due to increased demand, a trend that may¶ have long-term repercussions. Identified uranium deposits can fuel existing nuclear plants¶ for about 80 years without reprocessing. Reprocessing can extend the life of current¶ uranium resources for an additional 15 to 20 years.¶ 91¶ Total conventional uranium¶ resources, including undiscovered deposits that are estimated using indirect geological¶ evidence and extrapolated values, can fuel existing plants for around 200 years.¶ 92¶ In the¶ short-term, however, prices have risen sharply because of an announced increase in nuclear¶ plants that will require fuel: China is intending to increase nuclear power as a source of¶ national energy by 7% in the next ten years, and countries such as Russia, Pakistan, and¶ South Korea are all building new reactors.¶ 93¶ Another benefit of reprocessing is the¶ additional plutonium and uranium recovered per kilogram of spent fuel reprocessed; this¶ amount replaces a portion of the raw material that goes into the fuel cycle. The amount of¶ recovered uranium is .94 kg/kgHM, and the amount of recovered plutonium is .01014¶ kg/kgHM.¶ 94

### Plan Text

#### Thus the plan: The United States Federal Government should provide a twenty-percent investment tax credit for the deployment of domestic nuclear fuel recycling.

### Solvency

#### Observation Four: Solvency

#### Tax incentives would solve for reprocessing – makes it commercially more desirable

Lagus 5 (Todd, 2005 WISE Intern, University of Minnesota, WISE, “Reprocessing of Spent Nuclear Fuel: A Policy Analysis” <http://www.wise-intern.org/journal/2005/lagus.pdf>, RSR)

The economic analysis shows that the reprocessing or even the once through nuclear cycle is not yet economically desirable to investors. However, changes in government policies, including environmental regulations already mentioned and economic policies, could improve the competitiveness of both technologies. The University of Chicago nuclear power study analyzes the effects of government involvement in the future of the once through cycle using several different forms of support: loan guarantees, accelerated depreciation, and investment tax credits. Loan guarantees in this case refer to the obligation of the government to repay part of the loan should a utility company not be able to repay. The 2005 Energy Bill, which passed in July 2005, would make advanced nuclear power plants eligible for federal loan guarantees and provide a tax credit for nuclear power production. This would lessen the risks associated with capital costs for investors, and according to the Chicago study, reduce the LCOE for a nuclear reactor by 4 mills/kWh to 6 mills/kWh. The next financial subject, accelerated depreciation, refers to the ability of an investor to utilize the investment tax deductions early on in the lifetime of the payment rather than receive the same deduction each year in a linear fashion. Accelerated depreciation helps investors absorb capital costs, which for nuclear power generation are large. The University of Chicago study calculates a reduction in the LCOE for a 7 year depreciation policy of 3 mills/kWh to 4 mills/kWh. Tax incentives for nuclear power production are the final policies that could make nuclear power and reprocessing more desirable. An investment tax credit of 10 percent would create an LCOE reduction between 6 mills/kWh and 8 mills/kWh, while a 20 percent credit could create cost reductions between 9 mills/kWh and 13 mills/kWh. 39 Production tax credits on a per kWh basis may also be used. Since reprocessing and the once through cycle are not appreciably different for the price, it is sufficient to assume 12 that similar effects for all three of these government policies would occur with policies applied to reprocessing. While it is no secret that monetary incentives would help the nuclear reprocessing investments, there is still the question of whether or not the government should provide economic support to the industry. As with any government funding, it is politically important not to be viewed by other energy generation industries, i.e. gas and coal, as favoring nuclear power over other sources. Given the recent concerns for global warming, tax incentives and loan guarantees for nuclear technologies seem like a realistic option especially in the absence of emission regulations. Accelerated depreciation also is an unobtrusive option that could help the industry by easing capital costs.

#### Government investment key – necessary to mitigate risks from government regulations.

Selyukh 10 (Alina, Staff Writer, “Nuclear waste issue could be solved, if...”, 8-17-10, Reuters,

<http://www.reuters.com/article/2010/08/17/us-nuclear-waste-recycling-idUSTRE67G0NM20100817>, RSR)

Since the U.S. agency declared spent fuel reprocessing too costly, U.S. research into new technologies has slowed. President George W. Bush offered federal backing for nuclear waste management alternatives, but over the years the policy has meandered and had few incentives to lure companies, said Steven Kraft, senior director of used-fuel management at the Nuclear Energy Institute, the industry's trade organization. Being able to burn through rather inexpensive uranium to produce energy, companies are wary of investing millions into recycling technology that may go against the national policy. Still, industry support for the ideas is strong, if not for the procedure itself then for allowing the market -- not the government -- to determine its cost-effectiveness and fate. Duke Energy, which operates seven nuclear plants, would support nuclear recycling if there was a cost-effective national policy, spokeswoman Rita Sipe said. GE Hitachi has proposed a new generation of fast reactors that, they say, could return to the grid up to 99 percent of energy contained in the uranium, compared to recovering 2 or 3 percent from a common light water reactor. But they want federal support for more research and, ultimately, commercialization of the technology, said chief consulting engineer Erik Loewen. That support, in essence, would have to come in a form of subsidies such as cost sharing or loan guarantees, said Jack Spencer, nuclear energy policy research fellow at the Heritage Foundation think tank. "What the industry needs... is something to mitigate government-imposed risks," he said of the regulatory regime.

#### Government investment necessary – provides appropriate risk mitigation and shortens the timeframe for completion.

IAEA 8 (International Atomic Energy Agency, “Spent Fuel Reprocessing Options”, August 2008, RSR)

With the expected high costs and significant risks involved in constructing new nuclear facilities, e.g., reprocessing facilities, the impact of various ownership options need to be considered. These options include government funding, regulated funding, private funding, and combinations of public and private funding. These different funding approaches may significantly impact the costs of fuel cycle services. Given the very long time frames associated with building reprocessing facilities, there exist risks other than technological or economic, which need to be dealt with. These include evolving government policy, public and political acceptance, and licensing risks. As a result, private investors are unlikely to provide capital unless the initial high risks factors are mitigated through appropriate risk sharing agreements (e.g., loan guarantees, equity protection plans, tax credits, etc.) with government entities.

## 2AC

### T – Energy Production

#### We meet: Nuclear fuel recycling is energy production.

World Nuclear Association 12 [Processing of Used Nuclear Fuel, http://www.world-nuclear.org/info/inf69.html]

Used nuclear fuel has long been reprocessed to extract fissile materials for recycling and to reduce the volume of high-level wastes. ¶ New reprocessing technologies are being developed to be deployed in conjunction with fast neutron reactors which will burn all long-lived actinides. ¶ A significant amount of plutonium recovered from used fuel is currently recycled into MOX fuel; a small amount of recovered uranium is recycled. ¶ A key, nearly unique, characteristic of nuclear energy is that used fuel may be reprocessed to recover fissile and fertile materials in order to provide fresh fuel for existing and future nuclear power plants. Several European countries, Russia and Japan have had a policy to reprocess used nuclear fuel, although government policies in many other countries have not yet addressed the various aspects of reprocessing.¶ Over the last 50 years the principal reason for reprocessing used fuel has been to recover unused uranium and plutonium in the used fuel elements and thereby close the fuel cycle, gaining some 25% more energy from the original uranium in the process and thus contributing to energy security. A secondary reason is to reduce the volume of material to be disposed of as high-level waste to about one fifth. In addition, the level of radioactivity in the waste from reprocessing is much smaller and after about 100 years falls much more rapidly than in used fuel itself.¶

#### Counter interpretation:

#### The aff has to affect both resource extraction and conversion into energy

Australian Government, Department of Climate Change and Energy Efficiency 2011 [“Energy Production and Consumption,” http://www.climatechange.gov.au/government/initiatives/national-greenhouse-energy-reporting/publications/supplementary-guidelines/energy-production-consumption.aspx]

Production of energy: in relation to a facility, means the:

1. extraction or capture of energy from natural sources for final consumption by or from the operation of the facility or for use other than in the operation of the facility
2. manufacture of energy by the conversion of energy from one form to another form for final consumption by or from the operation of the facility, or for use other than in the operation of the facility (regulation 2.23(3) NGER Regulations).

#### We meet the counter-interpretation: recycling involves both the act of reprocessing the used fuel and using it to create new nuclear energy.

#### Prefer our interpretation.

A. Predictability – Only our interpretation guarantees link arguments to both extraction and the burning of resources to produce energy. This is crucial link ground for pollution DAs and domestic/foreign energy tradeoff DAs.

B. Limits: Requiring the aff to both extract and convert the energy is necessary to eliminate affs that only extract, like capture carbon or methane or stockpile oil as a strategic military reserve with heg advantages. Also key to prevent affs that only burn fuels like Bataille-style affs that encourage rapid consumption or R&D affs that incentivize new ways to burn the same resources.

#### Competing interpretations are bad: Race to the bottom: they’re just trying to limit out one more case

#### Prefer reasonability: as long as we’re reasonably topical, there’s no reason to pull the trigger. Don’t vote on potential abuse.

### Peak Uranium

#### Proliferation concerns are empirically denied, and purification of spent fuel is impractical.

Klein, Associate Director of The Energy Institute at the University of Texas at Austin, 11 (Dale, Spent Nuclear Fuel Is An Abundant Source of Energy, 21st Century Science & Technology, 21 February 2011, http://www.21stcenturysciencetech.com/Articles\_2011/Spring-2011/Spent\_Nuclear\_Energy.pdf, da 8-23-12)

Now, more than three decades later, six nations have major ¶ ¶ commitments to reprocessing their spent fuel. The arguments ¶ ¶ against reprocessing as a proliferation concern are not compelling and obviously, other nations interested in extracting ¶ ¶ the energy value from their spent fuel do not align with U.S. ¶ ¶ policy.¶ ¶ A typical commercial nuclear power reactor will generate ¶ ¶ about 20 tonnes of spent fuel every year. Contained in that ¶ ¶ spent fuel is about 200 kilograms of reactor-grade plutonium. ¶ ¶ Often misunderstood, or misrepresented by opponents to recycling, the isotopic mixture of reactor-grade plutonium makes it ¶ ¶ unsuitable for nuclear weapons.¶ ¶ Weapons-grade plutonium is approximately 95 percent Pu-¶ ¶ 239, whereas reactor-grade is only about 50 percent Pu-239. ¶ ¶ The cost and complexity of the technologies required to purify ¶ ¶ reactor grade to weapons grade makes it impractical for use in ¶ ¶ nuclear weapons.¶ ¶ In fact, we know of, or strongly believe, that nine nations ¶ ¶ have developed nuclear weapons. Looking historically at the ¶ ¶ origins of the fissile materials used to develop those weapons, we know that the sources were either through enrichment of uranium or with the use of graphite or heavy-water-moderated production reactors, but not commercial ¶ ¶ reactors.¶ ¶ Israel, India, Pakistan, and North Korea are believed to have ¶ ¶ produced weapons-grade plutonium from the diversion of ¶ ¶ their heavy water research reactors to irradiate target materials. No nation has ever tried to produce nuclear weapons ¶ ¶ from the type of spent fuel discharged by commercial power ¶ ¶ reactors.

#### Norms and diplomacy are irrelevant – internal political will is the primary motivating factor driving prolif

Mez, senior associate Professor at the Department of Political and Social Sciences, Freie Universitat, ‘12

[Lutz, director of the Environmental Policy Research Centre, “Nuclear energy – any solution for sustainability and climate protection?” Energy Policy, Science Direct]

Viewed in historical terms, military use of nuclear energy has gone hand in hand with the development of civil nuclear technology, because most countries attached first priority to the development of nuclear weapons and other military uses, with production of energy in nuclear power plants at first only being a waste product. This by-product developed its own momentum, however: nuclear power became an icon for clean, highly modern technology and technological progress. Moreover, it was a risk-free, highly profitable business for operators of plants because governments paid considerable sums in subsidies and producers could pass on costs to electrical power customers. Branches of the economy which are the most intensive users of electrical power profited from cheap nuclear power —as did the militaries in countries with nuclear weapons—because civil nuclear facilities offer many possibilities for military use.¶ The borderlines between military and civil nuclear technology and thus between war and peace are often hazy (Mez et al., 2010). In order to minimize the risks of military use, regulation of civil use of nuclear energy have been contemplated within a multilateral framework for some time. The idea of establishing an international atomic energy agency (IAEA), to which states are to transfer uranium stocks and other fissionable material, was proposed by former US President Dwight D. Eisenhower in his Atoms for Peace speech3 as far back as 1953 and during the first Geneva atomic conference in 1955. The purpose of the IAEA was to develop methods to ensure that fissionable nuclear material can be used by humankind in a peaceful manner—in agriculture, medicine and energy production for countries and regions of the world with limited energy resources. The Non-Proliferation Treaty, which went into effect in 1970, constituted an attempt to prevent nuclear beggarsfrom becoming nuclear powers through civil nuclear technology transfer. In reality, however, a series of countries including Israel, India, Pakistan and North Korea have obtained nuclear weapons under the pretext of civil use of nuclear power, while other countries such as Iran are accused of having this same intention. This development shows that it is difficult to prevent nuclear weapons from being built and that there is a great likelihood that more and more countries will obtain nuclear capabilities in the future. When a nuclear infrastructure is in place and the basic material for weapons is being produced in facilities for enrichment or reprocessing—in military reactors, dual-purpose reactors or fast breeder-reactors—then it is merely a question of political will and willingness to invest in nuclear technology which decides whether a country develops nuclear weapons or not.

#### Reprocessing facilities are safe – they’re designed to satisfy all relevant standards.

IAEA, ‘8

[International Atomic Energy Agency, “Spent Fuel Reprocessing Options”, August 2008, RSR]

Existing reprocessing facilities have been designed and constructed to satisfy all relevant national and international standards for the safekeeping of nuclear materials. The key to achieving safeguarding is accountability and transparency, resulting from communications and co-operation between the operator and safeguarding authorities. Today, specific approaches are implemented in reprocessing plants, tailored to take maximum benefit from the features of these plants, such as automation, computerised systems and remote monitoring. Based on the past experience at La Hague and Sellafield, new designs can incorporate smaller material balance zones and can utilize improved technology for the measurement of processes [24]. The new reprocessing plant at Rokkasho-Mura in Japan is an interesting case in point, with implementation of extensive safeguards measures largely automated to such extent that three-quarters of data collection are reported to be performed unattended [76].

### Cash Grants CP

#### Perm do both

#### Still provides support for reprocessing.

#### Perm solves best – combination of financing techniques is best for certainty

Kane, Senior Vice President of Nuclear Energy Institute, 5 (John, United States House of Representatives, Committee on Energy and Commerce, Subcommittee on Energy and Air Quality, Testimony for the Record, 16 February 2005, http://www.nei.org/publicpolicy/congressionaltestimony/testimonykaneextended, da 11-1-12)

We believe that companies can achieve the best results by pursuing a combination of options, including loan guarantees, investment tax credits, production tax credits and accelerated depreciation. The specific combination of financing tools and techniques will vary from company to company, and from project to project. But companies need a variety of options to move forward toward placing new plant orders.¶ Dr. Ivan Maldonado, an associate professor of mechanical, industrial and nuclear engineering at the University of Cincinnati, wrote Jan. 30 in The Cincinnati Enquirer that “Congress should include the tax incentive in a comprehensive energy bill that’s awaiting final action.” Maldonado wrote that a tax credit (similar to credits for renewables) “would block our backsliding into even greater oil dependency, provide needed electricity capacity, and help slow and eventually reverse the buildup of greenhouse gases.”¶ The financing challenges for the industry apply to the first few plants in any series of new capital-intensive baseload power plants. As first-of-a-kind capital costs decline, and as investors gain confidence that the licensing process works as intended, companies can finance subsequent plants without federal investment.

#### Certainty key to commercialization and aff solvency.

Berry and Tolley, ‘10

[Stephen and George, Professors of Energy Policy and Economics at the University of Chicago, “Nuclear Fuel Reprocessing Future Prospects and Viability”, University of Chicago Humanities, 11-29-2010, http://humanities.uchicago.edu/orgs/institute/bigproblems/Team7-1210.pdf]

The U.S. efforts to exploit nuclear power commercially originated as a result of the Atomic Energy Act of 1954 and specifically the creation of the Atomic Energy Commission (AEC) 58 . In 1957, the Price-Anderson Act limited utilities’ liabilities regarding nuclear accidents and helped promulgate interest in the commercial use of nuclear energy. 59 This act served an important role in relaying the government’s credible commitment to the nuclear industry. Initially, the U.S. nuclear industry was subject to the interaction of three groups; the nuclear/electric industry, the AEC, and the Congressional Joint Committee on Atomic Energy (JCAE). 60 In this respect, polices regarding the nuclear industry were centralized and left to the discretion of the regulators and the regulated industries themselves. This political environment fostered the expansion of the nuclear industry and investment in the technology. However, control over commercial nuclear policy became highly fragmented: By the time the JCAE was officially disbanded in early 1977, more **than a dozen committees** in the House and Senate had gained some oversight over nuclear energy policy. Once the decentralization of authority had occurred, proposals to create a single House energy committee with concentrated authority were defeated. This proliferation of oversight is far more typical of the American political system than the centralized JCAE had been. 61 Further, during this period there was a significant rise in the number of anti-nuclear activists namely the Union of Concerned Scientist and the National Resource Defense Council. 62 These groups were able to utilize this **fragmented political environment** to undermine government commitment to the industry. The revived arrangement for nuclear industry oversight can be characterized by a subcommittee structure “**open to competing interests**, as well as vulnerable to changes in the composition of interest groups”. 63 Moreover, the nuclear industry was subject to an increased volume of rules and regulations as the anti-nuclear activist groups employed the independent judiciary branch for their interests. The change in the political structure confronting the nuclear industry undermined the feasibility of credible commitment of government toward the industry. Subsequently, this helped lead to the decline of the commercial nuclear industry in the U.S in addition to the Three Mile Island (TMI) accident. This situation contrasts the environment of the French nuclear industry. The American combination of fragmented power, little reliance on bureaucratic expertise, an independent judiciary, and opposing interest groups greatly undermines the ability of the U.S. government to credibly commit to the nuclear power industry. In France, despite substantial anti-nuclear interest groups, the impermeability of the institutional setup—no division of power, weak judiciary, and reliance on bureaucratic expertise— effectively prevents activists from influencing policy outcomes. 64 The French exploration into commercial nuclear energy and subsequent promotion of nuclear energy was the result of “a perceived shortage of enriched uranium, a need for weapons-grade materials, and the desire for energy independence from foreign states.” 65 In contrast to the U.S., the political environment in regards to nuclear energy in France has remained stable over the course of the last fifty years. In 1955, three government organizations banded together to promote nuclear power; namely: Electricité de France (EDF—the state—owned utility empowered by the Ministère de l’Industrie et des Finances), the Commissariat à l’Energie Atomique (CEA—with a promotional mission parallel to America’s AEC), and Production d’Electricité d’Origine Nucléaire (PEON—an advisory group to the CEA comprised of CEA, EDF, state, and industry representatives). 66 The nuclear industry maintains a high degree of central planning and state integration. 67 This political environment has provided the means for credible government commitment to the industry. Though there has been strong anti-nuclear rhetoric domestically in France the well insulated governmental setup towards nuclear energy has prevented these groups access to any policy-making forum. Further, these groups are afforded less influential power toward the industry due to a weaker judiciary than is present in the U.S. 68 Therefore, the uncertainty surrounding the commitment of the government toward the nuclear industry in France is far less than in the U.S. The French political structure “can carry out a long-term policy while ignoring the fluctuations of public opinion.” 69 This lack of “uncertainty” is important when we consider the effect that it has on transaction costs for the utilities attempting to employ nuclear facilities and investors realizing a return on their outlays. The U.S. political structure has led to an increase in transaction costs for its domestic nuclear industry, while the French structure is able to mitigate similar types of increases. As a result of the political structure, transaction costs for the nuclear industry are higher in the U.S. than they are in France. In opening the policy forum to anti-nuclear interest groups, the U.S. nuclear industry experienced procedural delays and increased compliance costs for nuclear facilities. From 1954 to 1979, the average lead times, including the time from order through commercial operation, increased from 2 to 6 years in France and from 3 to nearly 13 years in the United States. 70 Further, French programs typically presented greater stability in lead times as well as fewer delays than in the United States. 71 The nuclear industry in the U.S has seen an increase in uncertainty for their transaction costs in order to protect their large sunk costs. This has resulted in an increased perception of risk on the part of investors and subsequently increased the cost of capital for the technology: “lengthening the regulatory process increases the capital costs of the plant by pushing the revenue received from operation further into the future and by adding to the total interest payments on construction loans.” 72 **This political institutional framework provides an understanding of** the challenges which confront nuclear reprocessing in the U.S.

#### Investment tax credits are key to solve –

#### Key to solve waste – investment is key to the development of new technologies like IFR’s to solve 100% of the waste problem – That’s Bastin

#### Permanence is key – temporary incentives for recycling have failed in the past due to the fear of going against national policy, so only a permanent change in tax structures can spur reprocessing – that’s Selyukh

#### Permanence is key – the industry is afraid of evolving government policy – that’s IAEA.

#### Tax credits are key – forces government to share the risks – that’s IAEA.

#### Plan is key to cost reduction – 20% investment tax credits reduce costs by 9 to 13 mills/kWh – our evidence is in the context of reprocessing – that’s Lagus.

#### Plan is key to investment – industry executives are waiting for a tax credit to invest

Kane, Senior Vice President of Nuclear Energy Institute, 5 (John, United States House of Representatives, Committee on Energy and Commerce, Subcommittee on Energy and Air Quality, Testimony for the Record, 16 February 2005, http://www.nei.org/publicpolicy/congressionaltestimony/testimonykaneextended, da 11-1-12)

The industry has taken enormous strides during the past few years to explore alternatives for new nuclear plants. Investment in new nuclear generation is a key priority for the industry. We believe that it is wise energy policy to support public-private partnerships in jumpstarting the construction of new nuclear plants.¶ The H.R. 6 conference report included several important tax provisions supporting investment in new nuclear facilities; the industry would welcome the same provisions in the bill you are currently crafting. However, we realize that the jurisdiction for these measures lies with the tax-writing committees. ¶ We would urge that you examine the inclusion of such measures as an investment tax credit, accelerated depreciation, production tax credits (similar to those detailed in Section 45) or a combination of these investments tailored to the needs of those interested in building new plants. We ask you to consider how these measures may augment a company’s strategy to build new nuclear plants, in view of varying competitive structures within energy companies’ states, geographic areas or service territories.

#### Their incentives discourage innovation to solve warming – plan provides enough to give a signal without discouraging other innovation.

Lagus 5 (Todd, 2005 WISE Intern, University of Minnesota, WISE, “Reprocessing of Spent Nuclear Fuel: A Policy Analysis” <http://www.wise-intern.org/journal/2005/lagus.pdf>, PC)

While it is no secret that monetary incentives would help the nuclear reprocessing ¶ investments, there is still the question of whether or not the government should provide ¶ economic support to the industry. As with any government funding, it is politically ¶ important not to be viewed by other energy generation industries, i.e. gas and coal, as ¶ favoring nuclear power over other sources. Given the recent concerns for global ¶ warming, tax incentives and loan guarantees for nuclear technologies seem like a realistic ¶ option especially in the absence of emission regulations. Accelerated depreciation also is ¶ an unobtrusive option that could help the industry by easing capital costs.

#### Warming leads to extinction.

Sify ‘10 (Sify, Sydney newspaper citing Ove Hoegh-Guldberg, professor at University of Queensland and Director of the Global Change Institute, and John Bruno, associate professor of Marine Science at UNC (Sify News, “Could unbridled climate changes lead to human extinction?”, <http://www.sify.com/news/could-unbridled-climate-changes-lead-to-human-extinction-news-international-kgtrOhdaahc.html>)

The findings of the comprehensive report: 'The impact of climate change on the world's marine ecosystems' emerged from a synthesis of recent research on the world's oceans, carried out by two of the world's leading marine scientists. One of the authors of the report is Ove Hoegh-Guldberg, professor at The University of Queensland and the director of its Global Change Institute (GCI). 'We may see sudden, unexpected changes that have serious ramifications for the overall well-being of humans, including the capacity of the planet to support people. This is further evidence that we are well on the way to the next great extinction event,' says Hoegh-Guldberg. 'The findings have enormous implications for mankind, particularly if the trend continues. The earth's ocean, which produces half of the oxygen we breathe and absorbs 30 per cent of human-generated carbon dioxide, is equivalent to its heart and lungs. This study shows worrying signs of ill-health. It's as if the earth has been smoking two packs of cigarettes a day!,' he added. 'We are entering a period in which the ocean services upon which humanity depends are undergoing massive change and in some cases beginning to fail', he added. The 'fundamental and comprehensive' changes to marine life identified in the report include rapidly warming and acidifying oceans, changes in water circulation and expansion of dead zones within the ocean depths. These are driving major changes in marine ecosystems: less abundant coral reefs, sea grasses and mangroves (important fish nurseries); fewer, smaller fish; a breakdown in food chains; changes in the distribution of marine life; and more frequent diseases and pests among marine organisms. Study co-author John F Bruno, associate professor in marine science at The University of North Carolina, says greenhouse gas emissions are modifying many physical and geochemical aspects of the planet's oceans, in ways 'unprecedented in nearly a million years'. 'This is causing fundamental and comprehensive changes to the way marine ecosystems function,' Bruno warned, according to a GCI release. These findings were published in Science.

### Der Derrian K

#### Our interpretation is that debate should be a question of the aff plan versus a competitive policy option.

#### This is key to ground and predictability – infinite number of possible kritik alternatives or things the negative could reject explodes the research burden. That’s a voting issue.

#### Focusing on statism and security is key to real world change.

Buzan 4 (Barry , December, Montague Burton Prof. of International Relations @ the London School of Economics and honorary prof. @ the University of Copenhagen, "Realism vs. Cosmopolitanism" <http://www.polity.co.uk/global/realism-vs-cosmopolitanism.asp>

**A.Mc.:** But would not a realist response be that the very issues David seeks to highlight are largely marginal to the central dilemmas of world politics: the critical issues of war and peace, life and death. **B.B.:** Again, that is a difficult question for realism because in traditional realism there was a rather clear distinction between 'high' and 'low' politics, high politics being about diplomacy and war, and low politics being about economics and society and many issues like the weather and disease. And because of the change in the importance of the different sectors that I mentioned earlier, this becomes problematic for realism. But the realists have been fairly agile. The realist line of defence would be that in most areas of world politics - again the emphasis on politics - states are still the principle authorities. And there is nothing that stops them from co-operating with each other. Thus, realists, or at least a good proportion of realists, can live quite comfortably with the idea of international regimes in which states, as the basic holders of political authority in the system, get together sometimes with other actors, sometimes just with other states, to discuss issues of joint concern, and sometimes they can hammer out of a set of policies, a set of rules of the game, which enable them to co-ordinate their behaviour. Now, this certainly does not feel like traditional power politics realism. You can think of it to some extent in terms of power politics by looking at issue power; who are the big players in relation to any big issue? Who are the people who have any kind of control? Who loses out?, etc.. There is, therefore, an element of power politics in this whole notion of regimes, and it does retain a strong element of state centrism. I think the realist would say: if you discount the state, where is politics? Where is it located? You cannot eliminate politics, as some liberals sometimes seem to do. To wish the state away, to wish politics away, is not going to generate results. The good dyed-in-the-wool realist would argue that power politics is a permanent condition of human existence. It will come in one form or another, in one domain or another, in relation to one issue or another, but it will always be there. It will be politics and it will be about relative power. And at the moment the state is still an important player in the game.

#### Case outweighs: by failing to solve the impending waste crisis, they allow waste on-site and Yucca Mountain to eventually blow up, leading to extinction. Rejecting simulation on the issue won’t resolve problems on-site or at Yucca.

#### Permutation do both.

#### Energy scenario-planning is good for decisionmaking.

Lankshear and Noble, 2k

[Colin (Adjunct Professor at James Cook University, Mount St Vincent University and McGill University. He is an internationally acclaimed scholar in the study of new literacies and digital technologies) and Michele (Professor of Education at Montclair University), “Mapping postmodern literacies: A preliminary chart”,

http://www.literacyandtechnology.org/volume1/lankshearknobel.pdf]

Classic examples of scenario planning successes abound. An early one (from the 1970s) concerns the Shell Oil petroleum company whose scenario planning built in as a possibility a change in the price of oil—this occurred prior to the oil shocks of the mid 70s. At that time an oil price change, whilst possible, was practically unthinkable. Other companies certainly had not factored it into their way of thinking about the future. The company in question improved its business position among oil companies astronomically after oil prices increased. This is not to suggest that scenario planning is good only for business and profiteering activity. We think the kind of work that goes into scenario planning is exactly the kind of work that should be built into learning activities in schools, communities and workplaces. Since it is a form of reading and writing the world, it seems to us to qualify nicely as a new literacy: one which is comparatively new chronologically, and one that would most certainly be new to prevailing mindsets within formal literacy studies.

#### Even if predictions aren’t perfect acting on relative confidence of scenarios materializing is good---the alt is etiher political paralysis or pure reaction.

Ulfelder, Research Director for the Political Instability Task Force at Science Applications International Cooperation, ‘11

[Jay, “Why Political Instability Forecasts Are Less Precise Than We’d Like (and Why It’s Still Worth Doing)" May 5 dartthrowingchimp.wordpress.com/2011/05/05/why-political-instability-forecasts-are-less-precise-than-wed-like-and-why-its-still-worth-doing/]

If this is the best we can do, then what’s the point? Well, consider the alternatives. For starters, we might decide to skip statistical forecasting altogether and just target our interventions at cases identified by expert judgment as likely onsets. Unfortunately, those expert judgments are probably going to be an even less reliable guide than our statistical forecasts, so this “solution” only exacerbates our problem. Alternatively, we could take no preventive action and just respond to events as they occur. If the net costs of responding to crises as they happen are roughly equivalent to the net costs of prevention, then this is a reasonable choice. Maybe responding to crises isn’t really all that costly; maybe preventive action isn’t effective; or maybe preventive action is potentially effective but also extremely expensive. Under these circumstances, early warning is not going to be as useful as we forecasters would like. If, however, any of those last statements are false–if responding to crises already underway is very costly, or if preventive action is (relatively) cheap and sometimes effective–then we have an incentive to use forecasts to help guide that action, in spite of the lingering uncertainty about exactly where and when those crises will occur. Even in situations where preventive action isn’t feasible or desirable, reasonably accurate forecasts can still be useful if they spur interested observers to plan for contingencies they otherwise might not have considered. For example, policy-makers in one country might be rooting for a dictatorship in another country to fall but still fail to plan for that event because they don’t expect it to happen any time soon. A forecasting model which identifies that dictatorship as being at high or increasing risk of collapse might encourage those policy-makers to reconsider their expectations and, in so doing, lead them to prepare better for that event. Where does that leave us? For me, the bottom line is this: even though forecasts of political instability are never going to be as precise as we’d like, they can still be accurate enough to be helpful, as long as the events they predict are ones for which prevention or preparation stand a decent chance of making a (positive) difference.

#### Vague alts are bad: we can’t pin them down on what they’re doing and it allows them to be shifty in the block. Voter for fairness.

#### Turn: Our scenario-evaluations are crucial for ethically responsible politics. Theoretical kritik is insufficient—we need realistic as if stories to generate changes in practice.

Williams, Professor of International Politics at the University of Wales at Aberystwyth, ‘5

[Michael, The Realist Tradition and the Limits of International Relations, p. 165-167]

Moreover, the links between sceptical realism and prevalent post-modern themes go more deeply than this, particularly as they apply to attempts by post-structural thinking to reopen questions of responsibility and ethics.80 In part, the goals of post-structural approaches can be usefully charactised, to borrow Stephen White’s illuminating contrast, as expressions of ‘responsibility to otherness’ which question and challenge modernist equations of responsibility with a ‘responsibility to act’. A responsibility to otherness seeks to reveal and open the constitutive processes and claims of subjects and subjectivities that a foundational modernism has effaced in its narrow identification of responsibility with a ‘responsibility to act’.81 Deconstruction can from this perspective be seen as a principled stance unwilling to succeumb to modernist essentialism which in the name of responsibility assumes and reifies subjects and structures, obscures forms of power and violence which are constitutive of them, and at the same time forecloses a consideration of alternative possibilities and practices. Yet it is my claim that the willful Realist tradition does not lack understanding of the contingency of practice or a vision of responsibility to otherness. On the contrary, its strategy of objectification is precisely an attempt to bring together a responsibility to otherness and a responsibility to act within a wilfully liberal vision. The construction of a realm of objectivity and calculation is not just a consequence of a need to act – the framing of an epistemic context for successful calculation. It is a form of responsibility to otherness, an attempt to allow for diversity and irreconcilability precisely by – at least initially – reducing the self and the other to a structure of material calculation in order to allow a structure of mutual intelligibility, mediation, and stability. It is, in short, a strategy of *limitation*: a wilful attempt to construct a subject and a social world limited – both epistemically and politically – in the name of a politics of toleration: a liberal strategy that John Gray has recently characterized as one of *modus vivendi*.82 If this is the case, then the deconstructive move that gains some of its weight by contrasting itself to a nonor apolitical objectivism must engage with the more complex contrast to a sceptical Realist tradition that is itself a constructed, ethical practice. This issue becomes even more acute if one considers Iver Neumann’s incisive questions concerning postmodern constructions of identity, action, and responsibility.83 As Neumann points out, the insight that identities are inescapably contingent and relationally constructed, and even the claim that identities are inescapably *indebted* to otherness, do not in themselves provide a foundation for practice, particularly in situations where identities are ‘sedimented’ and conflictually defined. In these cases, deconstruction alone will not suffice unless it can demonstrate a capacity to counter in practice and not just in philosophic practice the essentialist dynamics it confronts.84 Here, a responsibility to act must go beyond deconstruction to consider viable alternatives and counter-practices. To take this critique seriously is not necessarily to be subject yet again to the straightforward ‘blackmail of the Englightenment and a narrow ‘modernist’ vision of responsibility.85 While an unwillingness to move beyond a deconstructive ethic of responsibility to otherness for fear that an essentialist stance is the only (or most likely) alternative expresses a legitimate concern, it should not license a retreat from such questions or their practical demands. Rather, such situations demand also an evaluation of the structures (of identity and institutions) that might viably be mobilized in order to offset the worst implications of violently exclusionary identities. It requires, as Neumann nicely puts it, the generation of compelling ‘as if’ stories around which counter-subjectivities and political practices can coalesce. Wilful Realism, I submit, arises out of an appreciation of these issues, and comprises an attempt to craft precisely such ‘stories’ within a broader intellectual and sociological analysis of their conditions of production, possibilities of success, and likely consequences. The question is, to what extent are these limits capable of success, and to what extent might they be limits upon their own aspirations toward responsibility? These are crucial questions, but they will not be addressed by retreating yet again into further reversals of the same old dicohotomies.

#### Rational planning is better than any alternative because it uses external evidence as a check on dishonest and violent ideology. Instead we should seek to improve planning through new voices and perspectives.

Lynn, Sid Richardson Research Professor in the LBJ School of Public Affairs at UT Austin, ‘99

[Laurence, Journal of Policy Analysis and Management, ““A Place at the Table: Policy Analysis, Its Postpositive Critics, and the Future of Practice”, 18:3, GZ]

Policy analysis, says Torgerson, is "haunted" by its original "dream" which, as he tells it, bearing "the unmistakable imprint of the positivist heritage," is of the abolition of politics (p. 34, emphasis added). "Professional policy analysis," he says, "is not really of this world-this all-too-human world of conflict, confusion, and doubt.... [T]he analyst . . . becomes one who performs remote operations on an essentially alien object" (p. 35). Because the goals of policy are matters of value, not facts and logic, goals cannot be included within the scope of what the policy analyst knows about. As a result, conventional policy analysis is "blinded to political reality" (p. 37). The policy analysts' "dream," he says, must be seen for the nightmare that it is: Huxley's Brave New World, Orwell's 1984. Writing in 1986, Torgerson was optimistic that the "spell of positivism" might be broken by the postpositive turn in social science. The policy analyst is succumbing to the temptation to join society and develop the "participatory potential" of policy analysis. Intellectual sustenance for this movement was being provided by Majone's thinking on policy analysis, which helps shatter "the technocratic expectation of precise and certain solutions" (p. 44). New fields such as impact assessment, says Torgerson, invite broader evaluation of technocratic solutions. Postpositive policy analysts will come to have "an acute awareness of their own frailty and fallibility" and will "make their humanity apparent" (p. 51).

#### Realism is inevitable – states will always seek to maximize their power

Mearsheimer 1 (professor of political science at University of Chicago, The Tragedy of Great Power Politics, pg. 2)

The sad fact is that international politics has always been a ruthless and dangerous business, and it is likely to remain that way. Although the intensity of their competition waxes and wanes, great powers fear each other and always compete with each other for power. The overriding goal of each state is to maximize its share of world power, which means gaining power at the expense of other states. But great powers do not merely strive to be the strongest of all the great powers, although that is a welcome outcome. Their ultimate aim is to be the hegemon—that is, the only great power in the system.

#### We can successfully diagnose threats – empirical evidence makes these predictions reliable.

Chernoff, Professor of IR and Director of IR at Colgate University, ‘9

[Fred, “Conventionalism as an Adequate Basis for Policy-Relevant IR Theory”, European Journal of International Relations, 15:1, Sage]

For these and other reasons, many social theorists and social scientists have come to the conclusion that prediction is impossible. Well-known IR reflexivists like Rick Ashley, Robert Cox, Rob Walker and Alex Wendt have attacked naturalism by emphasizing the interpretive nature of social theory. Ashley is explicit in his critique of prediction, as is Cox, who says quite simply, ‘It is impossible to predict the future’ (Ashley, 1986: 283; Cox, 1987: 139, cf. also 1987: 393). More recently, Heikki Patomäki has argued that ‘qualitative changes and emergence are possible, but predictions are not’ defective and that the latter two presuppose an unjustifiably narrow notion of ‘prediction’.14 A determined prediction sceptic may continue to hold that there is too great a degree of complexity of social relationships (which comprise ‘open systems’) to allow any prediction whatsoever. Two very simple examples may circumscribe and help to refute a radical variety of scepticism. First, we all make reliable social predictions and do so with great frequency. We can predict with high probability that a spouse, child or parent will react to certain well-known stimuli that we might supply, based on extensive past experience. More to the point of IR prediction – scepticism, we can imagine a young child in the UK who (perhaps at the cinema) (1) picks up a bit of 19th-century British imperial lore thus gaining a sense of the power of the crown, without knowing anything of current balances of power, (2) hears some stories about the US–UK invasion of Iraq in the context of the aim of advancing democracy, and (3) hears a bit about communist China and democratic Taiwan. Although the specific term ‘preventative strike’ might not enter into her lexicon, it is possible to imagine the child, whose knowledge is thus limited, thinking that if democratic Taiwan were threatened by China, the UK would (possibly or probably) launch a strike on China to protect it, much as the UK had done to help democracy in Iraq. In contrast to the child, readers of this journal and scholars who study the world more thoroughly have factual information (e.g. about the relative military and economic capabilities of the UK and China) and hold some cause-and-effect principles (such as that states do not usually initiate actions that leaders understand will have an extremely high probability of undercutting their power with almost no chances of success). Anyone who has adequate knowledge of world politics would predict that the UK will not launch a preventive attack against China. In the real world, China knows that for the next decade and well beyond the UK will not intervene militarily in its affairs. While Chinese leaders have to plan for many likely — and even a few somewhat unlikely — future possibilities, they do not have to plan for various implausible contingencies: they do not have to structure forces geared to defend against specifically UK forces and do not have to conduct diplomacy with the UK in a way that would be required if such an attack were a real possibility. Any rational decision-maker in China may use some cause-and-effect (probabilistic) principles along with knowledge of specific facts relating to the Sino-British relationship to predict (P2) that the UK will not land its forces on Chinese territory — even in the event of a war over Taiwan (that is, the probability is very close to zero). The statement P2 qualifies as a prediction based on DEF above and counts as knowledge for Chinese political and military decision-makers. A Chinese diplomat or military planner who would deny that theory-based prediction would have no basis to rule out extremely implausible predictions like P2 and would thus have to prepare for such unlikely contingencies as UK action against China. A reflexivist theorist sceptical of ‘prediction’ in IR might argue that the China example distorts the notion by using a trivial prediction and treating it as a meaningful one. But the critic’s temptation to dismiss its value stems precisely from the fact that it is so obviously true. The value to China of knowing that the UK is not a military threat is significant. The fact that, under current conditions, any plausible cause-and-effect understanding of IR that one might adopt would yield P2, that the ‘UK will not attack China’, does not diminish the value to China of knowing the UK does not pose a military threat. A critic might also argue that DEF and the China example allow non-scientific claims to count as predictions. But we note that while physics and chemistry offer precise ‘point predictions’, other natural sciences, such as seismology, genetics or meteorology, produce predictions that are often much less specific; that is, they describe the predicted ‘events’ in broader time frame and typically in probabilistic terms. We often find predictions about the probability, for example, of a seismic event in the form ‘some time in the next three years’ rather than ‘two years from next Monday at 11:17 am’. DEF includes approximate and probabilistic propositions as predictions and is thus able to catagorize as a prediction the former sort of statement, which is of a type that is often of great value to policy-makers. With the help of these ‘non-point predictions’ coming from the natural and the social sciences, leaders are able to choose the courses of action (e.g. more stringent earthquake-safety building codes, or procuring an additional carrier battle group) that are most likely to accomplish the leaders’ desired ends. So while ‘point predictions’ are not what political leaders require in most decision-making situations, critics of IR predictiveness often attack the predictive capacity of IR theory for its inability to deliver them. The critics thus commit the straw (person) man fallacy by requiring a sort of prediction in IR (1) that few, if any, theorists claim to be able to offer, (2) that are not required by policy-makers for theory-based predictions to be valuable, and (3) that are not possible even in some natural sciences.15 The range of theorists included in ‘reflexivists’ here is very wide and it is possible to dissent from some of the general descriptions. From the point of view of the central argument of this article, there are two important features that should be rendered accurately. One is that reflexivists reject explanation–prediction symmetry, which allows them to pursue causal (or constitutive) explanation without any commitment to prediction. The second is that almost all share clear opposition to predictive social science.16 The reflexivist commitment to both of these conclusions should be evident from the foregoing discussion.

### Fiscal Cliff Politics

#### No IL between the deal reached in the uniqueness evidence and the deal necessary to prevent their impacts. Just saying that a deal will be reached does not establish that we will reach an effective deal in preventing the impact.

#### Plan solves the impact. Reprocessing key to maintaining tritium supplies which are key to the deterrent. That prevents rogue state aggression and escalation in hot spots throughout the world. That’s Schneider.

#### No fiscal cliff resolution now – everyone is too divided among party lines. And, deal takes too long so the impact is triggered anyway.

Cook, budget and tax correspondent for National Journal, 11-8

[Nancy, “To Avert a Fiscal-Cliff Catastrophe, Someone Has to Blink”, National Journal, 11-8,

http://www.nationaljournal.com/magazine/to-avert-a-fiscal-cliff-catastrophe-someone-has-to-blink-20121108, RSR]

The far more likely scenario for both parties is a swan dive over the fiscal cliff. The election gave Obama some leverage, especially since the Democrats retained control of the Senate. But House Republicans also kept their majority. Both parties view the status quo as an affirmation of their power. “The president feels like his mandate from a slim margin of victory is to raise taxes,” says a Republican Senate aide privy to GOP discussions. “A razor-thin margin will not change the principles of the Republicans.” A plunge would follow weeks of behind-the-scenes negotiations, public political posturing, and pressure from outside groups—both political and business ones. And it would surely shake the nation’s confidence. But it might not be all bad. True, from an economic standpoint, it would turn deficit reduction into a de facto program of austerity, just as the unemployment rate is sinking and the economy is recovering. But from a purely political standpoint, the cliff dive would allow lawmakers to negotiate with a clean slate. Neither party likes a recession per se, but they may both dislike one less than they dislike surrendering their entrenched tax positions. The fresh start would allow Republicans and Democrats to cut a deal appealing to both parties. As soon as the Republicans reinstated a majority of the 2001 and 2003 tax cuts, they could sell it to their base as a huge windfall: They succeeded in cutting taxes! They could also nudge the Democrats to tweak entitlement programs such as Medicare and potentially Social Security—another selling point with the GOP base. (Democrats may agree to some changes there, but they will be most reluctant to cut programs for the poor, such as Medicaid and food stamps.) Similarly, the Democrats could use the fiscal-cliff jump as a way to enact Obama’s campaign promises to tax top earners. The Republicans would have to agree to an increase in revenues—not just from future economic growth—and this, in turn, would allow Democrats to say they had fulfilled their campaign pledge and helped to level the playing field. It’s even possible that, if both parties concoct a deal quickly, they can mitigate the economic effects. But a prolonged battle (during which the spending cuts and tax hikes stay in place) would enervate the economy and sap the confidence of consumers, businesses, creditors, and other countries. It’s hard to see the route to a quick deal—especially one before the New Year’s deadline—because the players remain the same and the party lines are as extreme as ever. The president did call all four congressional leaders after the election to talk about the fiscal cliff; Obama, Boehner, and Reid spoke this week in a much friendlier tone than they have in the past about the need to compromise. But the substance has not shifted at all since the failed super committee and the epic battle in 2011 over the debt ceiling.

#### No compromise – tax rates

McAuliff 11/9 (Michael, http://www.huffingtonpost.com/2012/11/09/john-boehner-fiscal-cliff\_n\_2101648.html)

WASHINGTON -- House Speaker John Boehner (R-Ohio) offered conciliatory words but no actual signs of compromise Friday at his first post-election press conference, reiterating the Republican Party's opposition to raising any taxes to deal with the country's debt and deficit.¶ His postion raises the likelihood of another bitter showdown in Congress over the same fundamental issues of taxes and fairness that roiled the legislature in 2010, when the nation nearly defaulted on its debts.¶ This time, the country faces a "fiscal cliff" at the start of 2013, when the Bush-era tax cuts expire and the government has to start implementing a decade-long budget-cutting program worth about $1 trillion.¶ Democrats, who used to favor the expiration of most of the tax cuts, have refined their position in recent years in favor of retaining all but those on income above $250,000, which would affect about 2 percent of the population.¶ Republicans have opposed letting any taxes go up, and that remains their position, Boehner said in a speech Wednesday.

#### No link – Congress made a deal on funding that they will discuss all funding appropriations in March after the fiscal cliff.

#### Immigration reform thumps.

Fox News, 11-9

[Fox News Latino, “GOP opens door to immigration reform after election loss”,

http://latino.foxnews.com/latino/news/2012/11/09/gop-opens-door-to-immigration-reform-after-election-loss/, RSR]

Republicans are warming to the idea of reforming the "broken" U.S. immigration system in the wake of their defeat in this week's presidential election by Democratic incumbent Barack Obama, who was the choice of 70 percent of Hispanic voters. Among those raising the issue after Tuesday's loss at the polls is the GOP's highest-ranking elected official, House Speaker John Boehner, who speaks of the need for a plan to deal with the estimated 11 million undocumented immigrants now in the country. "What I'm talking about is a common-sense, step-by-step approach to secure our borders, allow us to enforce the laws and fix a broken immigration system," he said Friday at a press conference. "It's just time to get the job done," Boehner said, though declining to offer any specific ideas. Expressing Republicans' willingness to work with Democrats, the speaker stressed that "on an issue this big, the president has to lead."

#### Link is NUQ. Funding now. Worthington ev. says subsidies now. Even if no new reactors, there’s already the perception of Obama pushing.

#### Plan popular in Congress – bipartisan among important leaders.

Ling ‘9 (“Is the solution to the U.S. nuclear waste problem in France?” By KATHERINE LING, ClimateWire <http://www.nytimes.com/cwire/2009/05/18/18climatewire-is-the-solution-to-the-us-nuclear-waste-prob-12208.html?pagewanted=all> Published: May 18, 2009) RCM

South Carolina Sen. Lindsey Graham (R) earlier this month said he would like to bring such an "energy park" to the Savannah River Site -- where Areva is building the MOX facility -- and plans to speak to House leadership and President Obama on the matter. Reprocessing is moving elsewhere on the congressional front, including in draft legislation from Sen. Jeff Bingaman (D-N.M.), chairman of the Senate Energy and Natural Resources Committee, that would study the feasibility of a reprocessing facility as a part of comprehensive energy legislation. Sen. Lisa Murkowski (R-Alaska), the committee's ranking member, said she will propose an alternative nuclear provision to provide cost-sharing incentives for two reprocessing facilities and other new nuclear reactor incentives.

#### Leaders like Graham are key to negotiations – currently killing any hope of compromise.

Weisman, congressional correspondent, New York Times Washington Bureau, 11-9

[Jonathan, “Congress Sees Rising Urgency on Fiscal Deal”, The New York Times,

http://www.cnbc.com/id/49756267, RSR]

Mr. Corker said many Senate Republicans were willing to agree to a deal that raises more revenue through an overhaul of the tax code, and that additional revenue must be generated by taxation, not just economic growth. In a speech Thursday in his home state of South Carolina, Senator Lindsey Graham said that fellow Republicans should hold the line on tax rates, but that they had to accept that a reformed tax code would raise more revenues. Only then, he said, can they expect Democrats to negotiate changes to entitlement spending.

#### Their link evidence from 2007 says Congress does not like reprocessing because it’s premature. Our 1AC evidence indicates that it’s no longer premature.

#### Logical policymaker can do both – CP intrinsic test of USFG action. This justifies intrinsicness tests of the DA. As a congress person, you can vote aff and pass a fiscal cliff compromise.

#### Plan key to winning over McCain.

Fahey 9 (New Fuel Source: Nuclear Waste?, Jonathan Fahey, 07.22.09, 06:00 AM EDT <http://www.forbes.com/2009/07/21/nuclear-waste-energy-technology-breakthroughs-nuclear.html> ) RCM

But the politics of reprocessing have been heating up. Pro-nuclear energy Sens. John McCain, R-Ariz., and Lamar Alexander, R-Tenn., pushed Energy Secretary Steven Chu on the issue in the spring. McCain and others suggest one big reason new nuclear reactors are not being built is the uncertainty around where the spent fuel is going to go.

#### McCain key to fiscal cliff

MNI News 10/22 (https://mninews.deutsche-boerse.com/index.php/us-fiscal-cliff-watch-biz-leaders-push-big-deficit-cut-deal?q=content/us-fiscal-cliff-watch-biz-leaders-push-big-deficit-cut-deal)

Another bipartisan group of senators, led by Senate Armed Services Committee Chairman Carl Levin and Sen. John McCain, the ranking Republican on the panel, has been urging action to replace the coming across-the-board spending cuts with a different package. ¶ The letter emphasizes the need to balance deficit reduction "with the need to safeguard important priorities, particularly protecting our national security, vital domestic programs and our economic recovery.

#### No link – no reason Obama gets associated with the plan.

#### Cantor and House Republicans support nuclear power

Politico 11 (Cantor: nuclear power 'essential' for U.S. energy needs, http://www.politico.com/blogs/glennthrush/0311/Cantor\_nuclear\_power\_essential\_for\_US\_energy\_needs.html)

House Majority Leader Eric Cantor defended nuclear energy production Monday, after a series of explosions at a nuclear reactor in Japan, calling it “essential” to meeting American energy needs. The problems at the Fukushima plant 150 miles north of Tokyo have reignited the debate over the safety of nuclear energy production. Cantor told reporters Monday that the tsunami that ravaged Japan last week is to blame, not the reactor itself. “As far as we know, this is the result of a tsunami,” he said. “Nuclear power is an essential mix of the energy economy in this country.” The tsunami caused technical problems at the Japanese plant, which left nuclear rods exposed, raising the specter of Chernobyl-style meltdown. The timing couldn’t have been worse for House Republican leaders, who demanded last week that President Barack Obama speed up approval of new nuclear energy facilities.

#### House Republicans key to the deal – blocking it in the SQUO.

Tucker 11/9 (Sean Tucker is assistant managing editor for GovWin from Deltek, the network that helps government contractors win new business every day., http://govwin.com/seantucker\_blog/fiscal-cliff-deal-whats-planned/742506)

In fact, CNN notes, "Boehner and Republicans oppose raising taxes on anyone, and instead back a broad reform of the tax system that would lower rates further for everyone while eliminating some deductions and loopholes. While Boehner said this week that his side was open to increasing revenue from such reforms, he made clear that such increases should come from resulting economic growth instead of higher tax rates."¶ President Obama, meanwhile, has sent signals that he would veto any sequestration plan that did not include tax increases on the wealthiest Americans.¶ Senate negotiators, it seems, could agree to a compromise that would avert the fiscal cliff and could pass the Senate – but it would likely run into opposition in the House of Representatives. That, in fact, is precisely the scenario that created the sequestration problem in the first place – when a battle between the White House and House leaders over raising the nation's debt ceiling proved intractable, the two sides agreed to sequestration in its place. The Senate was willing to compromise. The Administration and House Republicans weren't.

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#### Public policy role playing in Academia is key to political agency and participation

Larson 4 [Larson, Associate Professor of Political Science at Dickinson College, ‘04]

(“Stephanie Greco, ‘We the People': Diversifying Role Playing in Undergraduate American Politics Courses”

American Political Science Association, PS: Political Science and Politics, Vol. 37, No. 2 (Apr., 2004), pg. 303, JKY)

Students are not asked to be members of the American public. The assignment described here brings "the people" back into politics through role playing by focusing specifically on people who tend to be left out of the political process. The public is an essential part of a democracy and arguably the one whose challenges and processes are the most immediately relevant for students in an American Government class. While some students might go on to hold elective or appointed offices in government, most will not. This is particularly true of those in introductory classes who might take only one class in political science. Yet, most students are, and will continue to be, members of the American public after they graduate. They need to see how this role can, and arguably, should be an active one. While our textbooks and lectures might make this point, a simulation can effectively illustrate it through active learning. A role-playing experience can be instructive preparation for "real (political) life" when it focuses on the activities of those outside of officialdom. Playing the roles of citizens, or prospective citizens, can also address diversity issues that elite role-playing assignments do not. By focusing on elite roles, most assignments do not fully utilize the potential of role playing for social attitude change. Studies show that after role playing students "become more aware of their own roles and understand more clearly other people's points of view" (Van Ments 1989, 30). Therefore, they are ideal for sensitizing students to the perspectives of people different from themselves. By having students role play other members of the mass public, an American government class can help students understand and empathize with people of different races, classes, genders, sexual orienta-tions, occupations, ages, and from various geographic locations. For many years, I have been using such a public role-playing assignment in my "Introduction to American Government" course to challenge students and satisfy course goals. The assignment utilizes active learning through the use of role playing, interviewing, and a myriad of web resources. It teaches students about American government, diversity, and the challenges confronted by "outside" groups in their attempts to get representation. Ultimately, the paper addresses the fundamental question underlying the debate between elitists and pluralists: "Does the public matter?" It does this by ask-ing students to explore a political prob-lem relevant to a fictional member of the public whom they are randomly as-signed. By looking at a problem, gov-ernment action and debate on the issues relevant to it, and ways that the person could try to get government to address the problem, students see the interconnectedness of the various topics in the course (policy, public opinion, elections, interest groups, the three branches, and federalism). Students ex-plore different types of information and sources in order to understand someone else's political problem and its history, proposed solutions, and the obstacles to enacting these solutions.