### 1st Off

#### Interpretation: topical affs are limited to occurring within the territorial boundaries of the U.S.

#### ‘In’ indicates inclusion within a limit or boundary

Merriam Webster, no date

[http://www.merriam-webster.com/dictionary/in]

Definition of IN

1 a —used as a function word to indicate inclusion, location, or position within limits <in the lake> <wounded in the leg> <in the summer>

b : into 1 <went in the house>

2 —used as a function word to indicate means, medium, or instrumentality <written in pencil> <bound in leather>

3 a —used as a function word to indicate limitation, qualification, or circumstance <alike in some respects> <left in a hurry>

b : into 2a <broke in pieces>

4 —used as a function word to indicate purpose <said in reply>

5 —used as a function word to indicate the larger member of a ratio <one in six is eligible>

#### The United States is: the several States, D.C., commonwealths, territories and possessions

United States Code, no date

[18 USC § 2340 – Definitions, http://www.law.cornell.edu/uscode/text/18/2340]

(3) “United States” means the several States of the United States, the District of Columbia, and the commonwealths, territories, and possessions of the United States.

#### Second, plan in a vacuum in extra topical- it offers incentives to any one for SMRs, regardless of physical location

#### Third, vote negative:

#### Extra T explodes limits by giving the aff access to ground outside of the topic which forces the neg into generics.

#### Ground- justifies affs like energy production overseas or on US foreign bases- that foreign policy ground gives them unpredictable advantages and link turns that tilt the debate in their favor

#### Punish them for a bad plan- it’s the locus point of the entire debate, competing interps is the only objective method, and it forces debater accountability for their sloppy practice.

### 2nd Off

#### The fifty states, Washington D.C., and relevant territories should substantially increase market-fixed production cost incentives for domestic deployment of small modular reactors.

#### States can take the lead in SMR development – South Carolina proves

Chourey 6/23/12 (Sarita, Savannah Morning News, “S.C. hopes to lead in small modular nuclear reactors,” <http://savannahnow.com/hardeeville/2012-06-23/sc-hopes-lead-small-modular-nuclear-reactors#.UB1RxshWpJU>, TGA)

COLUMBIA — Thousands of jobs could be coming to South Carolina, if federal funding helps develop small modular reactors in the state, a prospect that drew a challenge from a nuclear safety group during a news conference Tuesday. Government and industry leaders gathered outside the S.C. Statehouse to lay out how a grant program from the U.S. Department of Energy could strengthen the state’s economy and plug it into the potential $100 billion market. During Tuesday’s event, nuclear-safety activist Tom Clements tried to ask Republican Gov. Nikki Haley how the Palmetto State would address the risk that South Carolina could be stuck with spent fuel as a result of the new small modular reactors (SMR). “It’s logical that the spent reactors and all the spent nuclear fuel would come back here to South Carolina. Are you advocating that we become some kind of holding ground?” said Clements, addressing Haley. “That’s a different conversation altogether,” she responded. “This is about new technology and the new way that we look at nuclear. And so this is not a side conversation that we’re going to have ... .” Clements was then confronted by a Haley staff member, who sought to curtail his questions. Holtec International, whose corporate headquarters are in Jupiter, Fla., is among those competing for federal energy funding to design, license, manufacture and commercialize SMR technology. Representatives from Holtec, SCE&G and Areva, as well as Columbia Mayor Steve Benjamin, others, also convened around the podium at Tuesday’s news conference. SCE&G has offered to operate the reactor if Holtec builds it at the Savannah River Site. “Not only do we have the incredible regulatory environment, we have great support at the federal level, at the state level, and certainly at the local level ... which is, I must say, rare,” said Benjamin. Haley said landing the new industry would benefit generations. “We want the country to see South Carolina is stepping forward not backward,” she said.

### 3rd Off

#### Compromise now but Obama’s pc is key

WSJ Jan. 3rd

[Potomac Watch, the Wall Street Journal, January 3rd, 2013, Strassel: The Debt-Ceiling Fight Will Be Dirty, <http://online.wsj.com/article/SB10001424127887323374504578218751518184568.html>, uwyo//amp]

Only the GOP can answer these questions, but the point here is that Republicans had better have answered them—and clearly—before they step into the ring. The president has every intention of playing them exactly as he did in the cliff, and in 2011. Mr. Obama will lay out tax-hike demands, give no quarter on spending, not waver and, as the deadline approaches, use his bully pulpit and the media to cow the GOP into the sort of wrangling that led to this week's defeat. If the Republican strategy isn't crystal clear, if the party is again fractured, then Round Two is already Mr. Obama's. So once again: What, exactly, is the GOP prepared to do?

#### Obama’s leverage is key to new fights over debt ceiling and sequestration

-Political capital high: economy on cusp of revival

-AT: Compromise Bill Disproves: Compromised and merely delayed the big battles

Star Ledger, “Obama's legacy trap”, 1/1/2013. http://www.nj.com/us-politics/index.ssf/2013/01/obamas\_legacy\_trap.html

President Barack Obama hopes -- expects, really -- that '13 will be his lucky number, a year to cement his historical legacy and reap the benefits of an economy on the cusp of real revival.¶ That expectation, as much as anything, explains how Obama approached the fiscal cliff and why he opted for compromise over confrontation. The president, eyes fixed on history, always viewed the fight as an obstacle, not a destination, a thing to be gotten past on his way to breaking the historical pattern of weak, scandal-scarred and anticlimactic second-term presidencies.¶ But the endless battle over the budget -- new fights over the debt ceiling and automatic spending cuts loom in a matter of weeks -- could become a legacy trap for Obama, robbing him of precious leverage to redefine his relationship with Republicans on terms more favorable to an ambitious second-term agenda, scholars of the presidency say.¶ "People don't queue up in lines to see the pens for a budget deal under glass, or 'Hey, I just cut this deal with Boehner,'" says presidential historian Douglas Brinkley.¶ "Presidents are remembered for the big things. FDR did Social Security. Truman created the CIA. There's Eisenhower and the highway system. Kennedy and the moon," Brinkley added. "So, it's going to be Obama and what? Obamacare, that's the big one, and killing Bin Laden. There's room for one more big item. What will it be? Immigration? Climate change? It won't be deficits or the fiscal cliff."¶ The White House is casting the potential fiscal deal as a major victory because it forces Republicans to turn their backs on a two-decade policy of opposing all tax increases, even those on the wealthiest Americans, which is a "big win," in the words of one West Wing adviser.¶ For his part, Obama said Monday, "If we're going to be serious about deficit reduction and debt reduction, then it's going to have to be a matter of shared sacrifice -- at least as long as I'm president. And I'm going to be president for the next four years, I think..." he said with a widening smile on Monday.¶ The challenge for a president unusually attuned to his place in history is how to manage fights like the cliff without being diverted by them, and how to suppress the GOP challenge without it becoming a major drain of his time, popular good will and power.¶ "The question is whether he's willing to use the leverage he has to get a better deal. He has a chance to make history here," said Jared Bernstein, a former adviser to Vice President Joe Biden, reflecting the mixed emotions of many nervous progressives watching the cliff talks from the sidelines. "Standing up to them would not only be a gift to the country, but a big part of his legacy."¶ One staffer for a senior Senate Democrat, summing up the view of several other aides interviewed by POLITICO, called the potential deal a "cave," and warned that Obama's Monday afternoon campaign-style event ahead of the final deal was a "Leon Lett moment" -- a reference to the Dallas Cowboys lineman who fumbled the ball while celebrating a touchdown short of the goal line.¶ But Obama and his staff believe Americans would have blamed him for taking the country over the cliff, and they emphasize his refusal to negotiate over the looming debt ceiling in a couple of months. Nonetheless, even the president concedes that the smaller cliff deal, while possibly postponing bigger battles, prolongs a fight Obama had hoped to move quickly past.¶ Even if he were to become bogged down, Obama's place in history is already assured. He is the nation's first black president, a controversial Beltway neophyte who managed to ram through landmark health reform (the future of which future remains opaque), an incumbent who won a fresh term despite a sour economy, a commander in chief who ended two unwanted wars -- all the while tallying unprecedented national debt and deficits.

#### Nuclear power incentives have significant opposition – public and congressional

Andrew Freedman, Editor and Senior Science writer for Climate Central, “Feds Approve First Nuclear Reactors Since 1970s”, Climatecentral.org, February 9th, 2012.

By a v ote of 4 to 1 , the Nuclear Regulatory Commission approv ed the construction of the first new nuclear reactors to be built in the United States since 1 97 8. The reactors would be built at the Vogtle power plant near Way nesboro, Ga., which is a nuclear power plant operated by the Southern Company . As The Hill's E-2 Wire blog noted, the lone dissenting v ote was cast by NRC Chairman Gregory Jaczko. The nuclear industry has faced numerous obstacles, most recently the backlash following the Fukushima nuclear disaster in Japan, in its efforts to build new nuclear plants in the U.S., and the Commission has issued recommendations on how to better protect U.S. reactors from earthquakes and floods. The country currently operates 1 04 nuclear reactors, but all were approv ed at least three decades ago. “This is a historic day ,” said Marv in Fertel, president of the Nuclear Energy Institute, the industry ’s trade group in a statement. “Today ’s licensing action sounds a clarion call to the world that the United States recognizes the importance of expanding nuclear energy as a key component of a low-carbon energy future that is central to job creation, div ersity of electricity supply and energy security .” Andrew Restuccia, writing for The Hill, noted the project still needs to ov ercome public opposition to nuclear power that may result in a lawsuit against the project, and congressional opposition to a hefty $8.3 billion federal conditional loan guarantee for reactor construction. "Some Democrats in Congress — noting that the loan guarantee is more than 1 5 times the size of the one granted to the failed solar firm Soly ndra — hav e called on Obama not to finalize the loan." “Ithink we are putting our taxpay er money at unnecessary risk giv en the unresolv ed safety issues and the lessons that hav e been learned from Fukushima,” Rep. Edward Markey (D-Mass.), a senior Democrat on the House Energy and Commerce Committee and a v ocal critic of nuclear power, told The Hill Wednesday . The Obama administration has supported the dev elopment of new nuclear power plants as a way to reduce greenhouse gas emissons and cut the use of fossil fuels.

#### Lack of debt ceiling raise triggers default and collapses the world economy- bonds are a juggernaut in the world economy

Goldfarb Jan. 1st

[Zachary Goldfarb, January 1st, The Washington Post, ‘Fiscal cliff’ deal does little to tame threats from debt ceiling, high unemployment rates, <http://www.washingtonpost.com/business/fiscal-cliff/fiscal-cliff-deal-does-little-to-tame-threats-from-debt-ceiling-high-unemployment-rates/2013/01/01/8e4c14aa-5393-11e2-bf3e-76c0a789346f_story_1.html>, uwyo//amp]

The deal fell somewhere in between. But by gaining the support of both sides, it did not achieve what many economists believe is necessary for the short- and long-term success of the U.S. economy. Leaving the fate of the debt ceiling up in the air will cause anxiety among businesses and individuals, potentially crimping hiring, investing and consumer spending. In many ways, the threat of default in two months is a more serious risk than the Jan. 1 fiscal cliff deadline. If Congress does not increase the debt ceiling, the government will quickly run out of ways to pay the nation’s bills and make interest payments on the nation’s outstanding debt. Any failure by the government to meet its financial obligations could be seen as a default, shaking world financial markets, given the special role that U.S. government bonds play in the global economy. And while a default would be all but certain to push the economy into recession, growth is likely to be slow — and job-market improvement slight — even without such a cataclysmic event. The unemployment rate, which stands at 7.7 percent, is not expected to fall below 7.4 percent by the end of this year, and not below 6 percent until at least 2016 or later. In the midst of the recession, the government stepped in with spending programs and deep tax cuts to lift growth and reduce unemployment. A majority of economists say those efforts worked. But federal stimulus has been winding down. And the spending cuts and tax hikes set for 2013 are expected to be a drag on the economy — with government policy offsetting much of the robust recovery being experienced in the private sector. Nor does the agreement do what many analysts say is necessary to achieve long-term budget savings and tame the federal debt, which is projected to grow rapidly as a percentage of the economy in the coming decades.

#### Economic decline causes protectionism and war – their defense doesn’t assume accompanying shifts in global power.

Royal 10 – Jedediah Royal, Director of Cooperative Threat Reduction at the U.S. Department of Defense, 2010, “Economic Integration, Economic Signaling and the Problem of Economic Crises,” in Economics of War and Peace: Economic, Legal and Political Perspectives, ed. Goldsmith and Brauer, p. 213-215

Less intuitive is how periods of economic decline may increase the likelihood of external conflict. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defense behavior of interdependent states. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow. First, on the systemic level, Pollins (2008) advances Modelski and Thompson’s (1996) work on leadership cycle theory, finding that rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often bloody transition from one pre-eminent leader to the next. As such, exogenous shocks such as economic crisis could usher in a redistribution of relative power (see also Gilpin, 1981) that leads to uncertainty about power balances, increasing the risk of miscalculation (Fearon, 1995). Alternatively, even a relatively certain redistribution of power could lead to a permissive environment for conflict as a rising power may seek to challenge a declining power (Werner, 1999). Seperately, Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remain unknown. Second, on a dyadic level, Copeland’s (1996, 2000) theory of trade expectations suggests that ‘future expectation of trade’ is a significant variable in understanding economic conditions and security behavious of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations, However, if the expectations of future trade decline, particularly for difficult to replace items such as energy resources, the likelihood for conflict increases, as states will be inclined to use force to gain access to those resources. Crisis could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states. Third, others have considered the link between economic decline and external armed conflict at a national level. Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn. They write, The linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favor. Moreover, the presence of a recession tends to amplify the extent to which international and external conflict self-reinforce each other. (Blomberg & Hess, 2002. P. 89) Economic decline has been linked with an increase in the likelihood of terrorism (Blomberg, Hess, & Weerapana, 2004), which has the capacity to spill across borders and lead to external tensions. Furthermore, crises generally reduce the popularity of a sitting government. ‘**D**iversionary theory’ suggests that, when facing unpopularity arising from economic decline, sitting governments have increase incentives to fabricate external military conflicts to create a ‘rally around the flag’ effect. Wang (1996), DeRouen (1995), and Blomberg, Hess, and Thacker (2006) find supporting evidence showing that economic decline and use of force are at least indirectly correlated. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states, due to the fact that democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. DeRouen (2000) has provided evidence showing that periods of weak economic performance in the United States, and thus weak Presidential popularity, are statistically linked to an increase in the use of force. In summary, recent economic scholarship positively correlated economic integration with an increase in the frequency of economic crises, whereas political science scholarship links economic decline with external conflict at systemic, dyadic and national levels. This implied connection between integration, crisis and armed conflict has not featured prominently in the economic-security debate and deserves more attention.

### 4th Off

#### Nuclear industry fuels the power of the state and militarism enables social repression and control through the establishment of hierarchal social relationships and technology

Plumwood, 1984

[Val, Presenting to the social control conference @ Sydney, “The state and the expansion of nuclear technology.” Online, http://blogs.exeter.ac.uk/radicalideas/files/2010/11/Plumwood-1984-The-state-and-the-explanation-of-nuclear-technology-1.PDF] /Wyo-MB

The nuclear industry then has been largely state-developed, owned and promoted. We can't explain the phenomenon of its development, in the face of apparently major problems, risks and disadvantages, without seeing the state as having a crucial and largely independent role, independent that is of its more conventionally attributed role of protecting long-term capitalist interests.¶ Nuclear technology is not obviously in the interests of capital, although it does have numerous features which make it attractive for profit-making e.g. it is capital- intensive, large-scale, centralised and suitable for monopolisation. So of course are many other possible energy sources. But capital has required constant coaxing and reassurance to continue to participate, and the industry would apparently have become defunct some time ago if those mythical ft market forces had been allowed to prevail. Thus there have been no new orders for reactors in the U.S. since 1977, and the industry is in a financial mess even with the highly favourable conditions provided by the state. [2]¶ The industry does however seem to be highly suited to increasing the power of the state itself, both through its military connection, and through its contribution to overall technological, social and bureaucratic centralisation.¶ This seems to present a fairly clear case then where the state has operated with some relative autonomy in promoting a technology which appears to be in its own interests rather than primarily that of capital, and to be the chief promoter and beneficiary of the industry which capitalism has to be coaxed to support.¶ So far the data I have presented is consistent both with a sophisticated Marxist theory which allows some relative autonomy [3] to institutions such as the state, and with more traditional anarchist theories which see the state as the central organ of social repression and the production of hierarchical social relationships and associated technologies (this last a modern addition). There are however other factors which have to be taken into account to understand the kind of social control being exercised here, and which show that the state reduction model - the reduction of all significant factors to the state (or to some combination of state and capital) is too simple and has other defects as well. These factors show the need to press on beyond purely state or other reductive models and to develop a more pluralistic model of the operation of power which sees power as " a productive network which runs through the entire social body much more than as a negative instance whose function is repression". [4]

#### This technological control through nuclear power makes nuclear apocalypse inevitable through technological development—the tools that the state uses to monopolize centralized control and power lead to destruction of life

Hubbard, 1997

[Bryan, MA Thesis at Arizona state University, Nuclear criticism after the cold war: a rhetorical analysis of two contemporary atomic campaigns, 8-1-1997, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA327948] /Wyo-MB

Brummett (1989) notes the entelechial drive toward perfection at work in the rhetoric of nuclear weapons strategy. Hirschbein (1989) also saw the eventual progress of nuclear science enabling an "ersatz immortality -- immortalization through making a lasting monumental impact on history" (p. 167). This impulse to power is not new. Humanity has always feared death, seized the greatest power available to avoid death and then created rationalizations to romanticize death. Like other continuities flowing into the nuclear age, the drive toward perfection accelerates with nuclear knowledge and its accompanying industrial capacity. The drive toward perfection informs the other two continuities present in the nuclear age -- the desire to cut and control and a shared fascination with the apocalypse.¶ Since humanity became a problem-solving organism, it has strived to cut and control its environment in hopes of improving its strategic situation. Harris (1991) claimed the drive to control the environment involves an attempt to master energy. He¶ traced the search for energy through ancient times noting that the control of energy enabled the control not only of the environment but of its inhabiting organisms. As people became more organized and specialized, the control of energy became centralized. The modem experience of nuclear energy enables an acceleration of this process placing virtually unlimited power (energy) in the hands of an unprecedented few (Mumford, 1980). The tendency Harris observed is one continuity flowing through our current nuclear experiences. J. Burke and Omstein (1995) call this continuity the drive to cut and control.¶ This desire to cut and control nature makes human beings human and links our creativity and destructive capacities, our tool-using nature, and our problem-solving inclinations (J. Burke & Omstein, 1995). In The Chalice and The Blade: Our History, Our Future, Eisler (1988) sees the modem nuclear predicament as the logical perfection of ancient traditions which claim authority and legitimacy through the "power of the lethal Blade" (p. 184). She sees the current path of society set along a grim trajectory and says, "[a] dominator future is therefore, sooner or later, almost certainly also a future of global nuclear war -- and the end of all of humanity's problems and aspirations" (Eisler, p. 184). This trajectory for her originates thousands of years prior to the discovery of the atom. The cult of the blade originated in the "Initial Kurganization" of Old Europe from 4000-3500 B.C.E. according to Eisler (p. 250). The impulse to cut and control (J. Burke & Omstein, 1995) guides the development of humanity from its earliest tool-making days. The potential destructive power parallels the productive capacity of humanity's tools. This trajectory accelerates into the twentieth century creating a situation where,¶ according to Eisler, would-be totalitarians and their "faith in the power of the lethal Blade as the instrument of deliverance" (p. 184) become one source of today's nuclearism.

#### The alternative is to refuse nuclear power production in favor of the 1NC criticism.

#### And the alt solves—need analysis of power relationships embedded in nuclear knowledge and structures—key to resist centralized development of knowledge and power (green highlighting)

Plumwood, 1984

[Val, Presenting to the social control conference @ Sydney, “The state and the expansion of nuclear technology.” Online, http://blogs.exeter.ac.uk/radicalideas/files/2010/11/Plumwood-1984-The-state-and-the-explanation-of-nuclear-technology-1.PDF] /Wyo-MB

What is clear from recent events in Australia is the importance of moving beyond a narrow, 'political' approach to the nuclear issue to one which is based on an analysis of the power structures embedded in it. This is important for the survival of the anti-nuclear movement as an important social force in Australia. The anti-nuclear movement in Australia has had great strength and by some criteria, great success. But the recent treatment of the issue at the hands of politicians illustrates vividly the ultimate bankruptcy of elite-oriented strategies for change based on appeals to decision-makers and working within a state and electoral framework. An inability to focus on alternative strategies will probably cause the death or serious weakening of the movement in the coming period of political confrontation, yet its demise as a widespread activist issue would be a serious loss. An alternative approach, stressing long-term strategies and institutional analysis, has great promise because the multiplicity of factors, critiques and sites of resistance to nuclear power gives the issue great potential. And such a social movement also has the ability to bring about or reinforce social awareness of the undemocratic character of social life and of the need for other sorts of fundamental changes in social relations, provided of course that the means adopted, for example, for working in groups, are themselves appropriate to these multiple goals and sufficiently challenging to day-to-day hierarchical social relationships and power structures e.g. sexist and racist ones. [9]¶ In this strategy then the critique of the role of the state is critical, but it must be combined with a critique of the wider power structure involved. What implications does this analysis have for anarchism itself? Does anarchism emerge as just another form of activism and critique, and anarchists as anti-state activists along with feminists as anti-patriarchy activists for example? This may seem quite threatening to many anarchists, since it threatens the claim to a more central or 'purer' position.¶ Such a view however ignores the relation between the different critiques - it assumes that they just coexist peacefully side-by-side as separate pieces of an overall puzzle, needing only to be assembled in their separate purity to providing a critique, not only of general power structures, but of the means and strategies adopted by other social movements. This concern with means and the stress on appropriate ways of pursuing other political goals, has been traditionally important in anarchist thought.¶ If anarchism is conceived, to a large extent at least, as involving another way of doing something else, of pursuing other social and political goals and effecting social changes in appropriate ways, rather than just as a utopian and unrealizable goal, disconnected from strategies and from other movements for social change, then there is an important relationship between anarchism and other social movements for change. Links with other activist groups become crucial, as does attention to the means by which particular resistances to particular forms of power are conducted. Stress on purity of anarchist doctrine, on 'keeping the hands clean' by not mixing it with less idealistic or utopian social movements must then be seen as sterile and self-defeating, and as removing this fertile area for achieving change. The real challenge to contemporary anarchism, conceived of as a general resistance to hierarchical and centralising structures, would then be in the struggle within movements for social change for appropriate non-hierarchical processes and to achieve alternative social relations, as well as for the adoption of non-centralising means for achieving particular social goals.¶ Anarchism in this picture has a crucial role to play for other social movements in maintaining the means/ends critique, and in promoting non-centralising and non state-strengthening strategies for other activist movements. Other social movements such as the anti-nuclear movement then provide a crucial 'field' for anarchism, which, to the extent that it is a general critique of power and of processes for achieving change, may still have some claim to a central (if not centralising or reductive) role.

### Warming

#### SMRs can’t solve warming – they take too long

Makhijani 10

[ARJUN MAKHIJANI, electrical and nuclear engineer who is President of the Institute for Energy and Environmental Research MICHELE BOYD, former director of the Safe Energy Program at Physicians for Social Responsibility, Small Modular Reactors No Solution for the Cost, Safety, and Waste Problems of Nuclear Power,”http://www.psr.org/nuclear-bailout/resources/small-modular-reactors-no.pdf, September, \\wyo-bb]

Not a climate solution Efficiency and most renewable technologies are already cheaper than new large reactors. The long time—a decade or more—that it will take to certify SMRs will do little or nothing to help with the global warming problem and will actually complicate current efforts underway. For example, the current schedule for commercializing the above-ground sodium cooled reactor in Japan extends to 2050, making it irrelevant to addressing the climate problem. Relying on assurances that SMRs will be cheap is contrary to the experience about economies of scale and is likely to waste time and money, while creating new safety and proliferation risks, as well as new waste disposal problems.

#### Fossil fuel use in the nuclear reactor process negate any benefits

Lendman 11

(Stephen Lendman, Research Associate of the Center for Research on Globalization (CRG), 3-13-11, “NuclearMeltdowninJapan,” <http://www.thepeoplesvoice.org/TPV3/Voices.php/2011/03/13/nuclear-meltdown-in-japan>, \\wyo-bb]

Just the opposite, in fact. Although a nuclear power plant releases no carbon dioxide (CO2), the primary greenhouse gas, a vast infrastructure is required. Called the nuclear fuel cycle, it uses large amounts of fossil fuels. Each cycle stage exacerbates the problem, starting with the enormous cost of mining and milling uranium, needing fossil fuel to do it. How then to dispose of mill tailings, produced in the extraction process. It requires great amounts of greenhouse emitting fuels to remediate. Moreover, other nuclear cycle steps also use fossil fuels, including converting uranium to hexafluoride gas prior to enrichment, the enrichment process itself, and conversion of enriched uranium hexafluoride gas to fuel pellets. In addition, nuclear power plant construction, dismantling and cleanup at the end of their useful life require large amounts of energy.

#### Warming not real/anthropogenic- IPCC predictions fail and rely on faulty computer models – even if they win that the earth is warming, the rate is too slow to trigger their impacts

Bast & Taylor ‘11

[Joseph and James, CEO of the Heartland Institute, author of Rebuilding America’s Schools, Why We Spend Too Much on Health Care, Eco-Sanity: A Common-Sense Guide to Environmentalism, Education & Capitalism, Climate Change Reconsidered, and The Patriot’s Toolbox, and managing editor of Environment & Climate News, Senior Fellow for The Heartland Institute, bachelor degree from Dartmouth College and law degree from the Syracuse University College of Law, “Global Warming: Not a Crisis,” The Heartland Institute, 8.2.11., http://heartland.org/ideas/global-warming-not-crisis) //wyo-hdm]

How Much Warming? NASA satellite data recorded since 1979 allow us to check the accuracy of claims that the past three decades have been warming at an alarming rate. The data show a warming rate of 0.123 degrees C per decade. This is considerably less than what land-based temperature stations report during the same time period, and which are relied on by the IPCC (Christy, 2009). If the Earth’s temperature continues to rise at the rate of the past three decades, the planet would see only 1.23 degrees C warming over the course of an entire century. Most climate scientists, even “skeptics,” acknowledge that rising CO2 concentrations in the atmosphere would, all other things held constant, cause some small amount of warming. Alarmists claim that small amount will trigger increases in the amount of moisture in the atmosphere, which in turn will cause further warming. But other scientists have found no evidence of rising levels of moisture in those areas of the atmosphere where the models claim it should be found. Without this “amplification,” there is no global warming crisis (Singer, 2011). While the global climate warmed slightly during the 1980s and 1990s, it has not warmed at all since 2000, and there is some evidence that a cooling trend has begun (Taylor, 2007). This contradicts the predictions of the IPCC and poses a challenge to the theory that CO2 concentrations play a major role in global temperature trends. It confirms the views of many less-politicized climate scientists who acknowledge that the global climate is always warming or cooling (Michaels, 2005; Christy, 2006). The scientific community’s lack of certainty about future climate trends is rooted in the shortcomings of computer models. These models are the centerpiece of the IPCC’‘s reports, yet it is widely recognized that they fail to account for changes in precipitation, water vapor, and clouds that are likely to occur in a warmer world. It is a case of “garbage in, garbage out.” If we cannot predict how much warming will occur, how can we claim that continued human emissions of greenhouse gases is harmful?

#### Nuke power doesn’t solve emissions—

#### long timeframe-high carbon abatement costs mean natural gas swamps

Sokolski, 2010

[Henry, executive director of the Nonproliferation Policy Education Center, "The high and hidden costs of nuclear power." Policy Review 162 (2010): 53+. Academic OneFile. Web. 5 June 2012] /Wyo-MB

Another assertion nuclear power supporters frequently make is that once carbon is no longer free, their zero carbon emission power plants will be the clear, clean-energy victor. Yet nuclear power may already have priced itself out of the running in any carbon abatement competition. Factoring in industry construction, operation, and decommissioning costs, the total cost of abating one ton of carbon by substituting a new nuclear power plant for a modern coal-fired generator has been pegged by nuclear power critics at $120 or more. (3) This figure, which includes the costs of public subsidies, assumes fairly low capital construction costs (roughly one half of the industry's latest high-end cost projections). If one uses high-end projections, the cost for each ton of carbon abated approaches $200. Certainly there are much cheaper and quicker ways to reduce carbon emissions (see Figure 2). Just how rapidly nuclear power can abate carbon emissions is also a significant issue. Certainly, if one is interested in abating carbon in the quickest, least expensive fashion, building expensive nuclear plants that take up to a decade to bring on line will not be an appealing option. That's why in North and South America and the Middle East, the building of natural gas burning generators is currently an attractive, near-term option. Advanced gas-fired power plants can halve carbon emissions as compared to coal-fired plants, can serve as base or peak power generators, and can be brought on line in 18 to 30 months rather than the years upon years needed to build large reactors. Advanced gas-fired generator construction costs, moreover, are a fraction of those projected for nuclear power. (5)

#### state restrictions prevent solvency:

#### State restrictions mean aff can’t solve. California opposes nuclear power-

Weissman, 12

[Steve, Lecturer in Residence at Berkeley Law, Director of the Energy and Cleantech program, and Associate Director for Energy Law and Policy of the Center for Law, Energy & the Environment. Legal Planet, Ber“Betting on the Nuclear Renaissance” MARCH 13, 2012 <http://legalplanet.wordpress.com/2012/03/13/betting-on-the-nuclear-renaissance/>wyokb]

Consider some of the evidence: A year after the meltdown began in Fukushima, almost all of the plants on Japan’s extensive nuclear roster remain idle. Germany responded to the disaster by taking eight nuclear plants off line within several weeks and announcing its intention to shut down the rest by 2022. Unit 3 of the Olkiluoto Nuclear Power in Finland, scheduled to begin production in 2009, is delayed until at least 2014. In the United States, New York is fighting the relicensing of Indian Point, and Vermont wants to close down Vermont Yankee. California’s San Onofre Nuclear Plant and its 2,200 megawatts of generating capacity are off line indefinitely while operators try to understand why tubes carrying radioactive water, installed only two years ago, are leaking. Meanwhile, the state’s other coastal plant at Diablo Canyon is under increased scrutiny as experts consider the implications of yet another earthquake fault discovered near the plant. Both of the California facilities are up for relicensing in the next several years and face strong opposition.

California is key to national greenhouse gas reduction efforts.

Sperling, no date

[Dr. Daniel Sperling - Professor of Civil Engineering and Environmental Science and Policy Director of the Institute of Transportation Studies Acting Director of the UC Davis Energy Efficiency Center <http://ucanr.org/sites/CalClimateChange/files/107858.pdf>//wyokb]

In February 2007 Governor Schwarzenegger appointed me to the Air Resources Board (ARB). The board has eleven members; I’m the transportation expert on the board and also the person who has been most involved with energy and climate debates and research. My task is to play a lead role in helping to develop these climate policies, especially for the transportation sector, but broadly ARB is tasked with the responsibility of taking the lead administrative role in reducing greenhouse gases in California. It’s a huge responsibility, and not only because what we do for California is important—it’s even more important because the rest of the world is watching. What we do here in California is going to be imitated in other states, in Washington, and in other countries. We have a special responsibility to do this right and to come up with a model that others can use. I like to say that California is not an island, but it’s a model, and it’s a model for the rest of the world. We’ve been leaders with air pollution; I think we’re going to be leaders, for better or worse, with climate policy.

#### historic warming trends occurred without CO2 emissions- roman era proves

Waugh ‘12

[Rob, Columnist Archive for MailOnline, “Tree-rings prove climate was WARMER in Roman and Medieval times than it is now - and world has been cooling for 2,000 years”, 11.7.12., Mail Online, <<http://www.dailymail.co.uk/sciencetech/article-2171973/Tree-ring-study-proves-climate-WARMER-Roman-Medieval-times-modern-industrial-age.html>> //wyo-hdm]

Rings in fossilised pine trees have proven that the world was much warmer than previously thought - and the earth has been slowly COOLING for 2,000 years. Measurements stretching back to 138BC prove that the Earth is slowly cooling due to changes in the distance between the Earth and the sun. The finding may force scientists to rethink current theories of the impact of global warming. It is the first time that researchers have been able to accurately measure trends in global temperature over the last two millennia. Over that time, the world has been getting cooler - and previous estimates, used as the basis for current climate science, are wrong. Their findings demonstrate that this trend involves a cooling of -0.3°C per millennium due to gradual changes to the position of the sun and an increase in the distance between the Earth and the sun. ‘This figure we calculated may not seem particularly significant,’ says Esper, ‘however, it is also not negligible when compared to global warming, which up to now has been less than 1°C. 'Our results suggest that the large-scale climate reconstruction shown by the Intergovernmental Panel on Climate Change (IPCC) likely underestimate this long-term cooling trend over the past few millennia.’ The finding was based on semi-fossilised tree rings found in Finnish lapland. Professor Dr. Jan Esper's group at the Institute of Geography at JGU used tree-ring density measurements from sub-fossil pine trees originating from Finnish Lapland to produce a reconstruction reaching back to 138 BC. In so doing, the researchers have been able for the first time to precisely demonstrate that the long-term trend over the past two millennia has been towards climatic cooling. ‘We found that previous estimates of historical temperatures during the Roman era and the Middle Ages were too low,’ says Esper. ‘Such findings are also significant with regard to climate policy, as they will influence the way today's climate changes are seen in context of historical warm periods.’ The annual growth rings in trees are the most important witnesses over the past 1,000 to 2,000 years as they indicate how warm and cool past climate conditions were.

#### CO2 PROVIDES AN INSURANCE POLICY AGAINST ABRUPT CLIMATE CHANGE ENSURING THAT RAPID SHIFTS WONT HAPPEN

CO2 Science Magazine 03

(Center for the study of carbon dioxide and global exchange [www.co2science.org](http://www.co2science.org), “Rapid Climate Changes” Reviewed 22 January 2003
<http://www.co2science.org/journal/2003/v6n4c1.htm> WYO/jr)

Although much is made of the role of models in studying "the complex interplay between Dansgaard-Oeschger warm phases and Heinrich cold events," Bard correctly reports that "at present, models coupling the atmosphere, ocean, and ice sheets are still unable to correctly simulate that variability on all scales in both time and space," which suggests we do not fully understand the dynamics of these rapid climate changes.  Indeed, he forcefully notes that "all the studies so far carried out fail to answer the crucial question: How close are we to the next bifurcation [which could cause a rapid change-of-state in earth's climate system]?"  In this regard, he also notes that "an intense debate continues in the modeling community about the reality of such instabilities under warm conditions [our italics]," which is a particularly important point, seeing that all dramatic warming and cooling events have been observed in either full glacial or transitional periods between glacials and interglacials. This latter real-world fact clearly suggests we are unlikely to experience any dramatic warming or cooling surprises, as long as the earth does not beginning drifting towards glacial conditions, which is but another reason to not be concerned about the ongoing rise in the air's CO2 content. Indeed, it suggests that more CO2 in the atmosphere and its potential for modest warming are actually to be preferred as a preventive measure or "insurance policy" against unexpected abrupt climate changes. Interglacial warmth seems to inoculate the planet against climatic instabilities, allowing only the mild millennial-scale climatic oscillation that alternately brings the earth slightly warmer and cooler conditions typical of the Medieval Warm Period and Little Ice Age. Hence, and in light of the fact that the four preceding interglacials were able to tolerate temperatures fully 2°C *warmer* than those of the current interglacial ([Petit *et al*., 1999](http://www.co2science.org/journal/1999/v2n12c1.htm)), without any adverse climatic consequences, humanity would probably be wise to not surrender the atmospheric CO2 insurance policy we worked so hard to put in place over the course of the Industrial Revolution.

#### No risk of impact- impacts won’t take hold for several centuries and in order to kill off the planet they would have to occur within one lifespan

Lomborg 8

[Director of the Copenhagen Consensus Center and adjunct professor at the Copenhagen Business School

Bjorn, “Warming warnings get overheated”, The Guardian, 8/15, <http://www.guardian.co.uk/commentisfree/2008/aug/15/carbonemissions.climatechange>]

These alarmist predictions are becoming quite bizarre, and could be dismissed as sociological oddities, if it weren’t for the fact that they get such big play in the media. Oliver Tickell, for instance, writes that a global warming causing a 4C temperature increase by the end of the century would be a “catastrophe” and the beginning of the “extinction” of the human race. This is simply silly. His evidence? That 4C would mean that all the ice on the planet would melt, bringing the long-term sea level rise to 70-80m, flooding everything we hold dear, seeing billions of people die. Clearly, Tickell has maxed out the campaigners’ scare potential (because there is no more ice to melt, this is the scariest he could ever conjure). But he is wrong. Let us just remember that the UN climate panel, the IPCC, expects a temperature rise by the end of the century between 1.8 and 6.0C. Within this range, the IPCC predicts that, by the end of the century, sea levels will rise 18-59 centimetres – Tickell is simply exaggerating by a factor of up to 400. Tickell will undoubtedly claim that he was talking about what could happen many, many millennia from now. But this is disingenuous. First, the 4C temperature rise is predicted on a century scale – this is what we talk about and can plan for. Second, although sea-level rise will continue for many centuries to come, the models unanimously show that Greenland’s ice shelf will be reduced, but Antarctic ice will increase even more (because of increased precipitation in Antarctica) for the next three centuries. What will happen beyond that clearly depends much more on emissions in future centuries. Given that CO2 stays in the atmosphere about a century, what happens with the temperature, say, six centuries from now mainly depends on emissions five centuries from now (where it seems unlikely non-carbon emitting technology such as solar panels will not have become economically competitive). Third, Tickell tells us how the 80m sea-level rise would wipe out all the world’s coastal infrastructure and much of the world’s farmland – “undoubtedly” causing billions to die. But to cause billions to die, it would require the surge to occur within a single human lifespan. This sort of scare tactic is insidiously wrong and misleading, mimicking a firebrand preacher who claims the earth is coming to an end and we need to repent. While it is probably true that the sun will burn up the earth in 4-5bn years’ time, it does give a slightly different perspective on the need for immediate repenting. Tickell’s claim that 4C will be the beginning of our extinction is again many times beyond wrong and misleading, and, of course, made with no data to back it up. Let us just take a look at the realistic impact of such a 4C temperature rise. For the Copenhagen Consensus, one of the lead economists of the IPCC, Professor Gary Yohe, did a survey of all the problems and all the benefits accruing from a temperature rise over this century of about approximately 4C. And yes, there will, of course, also be benefits: as temperatures rise, more people will die from heat, but fewer from cold; agricultural yields will decline in the tropics, but increase in the temperate zones, etc. The model evaluates the impacts on agriculture, forestry, energy, water, unmanaged ecosystems, coastal zones, heat and cold deaths and disease. The bottom line is that benefits from global warming right now outweigh the costs (the benefit is about 0.25% of global GDP). Global warming will continue to be a net benefit until about 2070, when the damages will begin to outweigh the benefits, reaching a total damage cost equivalent to about 3.5% of GDP by 2300. This is simply not the end of humanity. If anything, global warming is a net benefit now; and even in three centuries, it will not be a challenge to our civilisation. Further, the IPCC expects the average person on earth to be 1,700% richer by the end of this century.

# \*\*\*A2 Warming

### Meltdowns

#### 1. No statistical basis for nuke power being dangerous – Nuclear power is the safest energy source.

Lewis, 06 - U of Richmond, T.C. Williams School of Law, J.D., former Navy engineer specializing in naval nuclear reactors (Neal H, “Interpreting the Oracle: Licensing Modifications, Economics, Safetey, Politics, and the Future of Nuclear Power in the United States,” 16 Alb. L.J. Sci. & Tech. 27, 2006)

Regardless of these nuclear accidents, fears about nuclear power are not founded on statistical fact. Worldwide, from 1970 until 1992, the coal industry has had the largest number of deaths resulting from energy production. [166](http://www.lexis.com/research/retrieve?_m=e88a2a9ca0791dfde3bc6990bc8d6f62&docnum=32&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=1cbd8ef90b68e79b19aae40720bdedb5" \l "n166" \t "_self) Over 6,000 people have died  [\*52]  from coal production-related accidents. [167](http://www.lexis.com/research/retrieve?_m=e88a2a9ca0791dfde3bc6990bc8d6f62&docnum=32&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=1cbd8ef90b68e79b19aae40720bdedb5" \l "n167" \t "_self) Strikingly, when the statistics for worldwide energy industries are compared on the basis of terawatts of energy produced per year, hydroelectric power is by far the most dangerous energy source. [168](http://www.lexis.com/research/retrieve?_m=e88a2a9ca0791dfde3bc6990bc8d6f62&docnum=32&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=1cbd8ef90b68e79b19aae40720bdedb5" \l "n168" \t "_self) That is, there is a high number of deaths associated with a relatively little-used energy source. [169](http://www.lexis.com/research/retrieve?_m=e88a2a9ca0791dfde3bc6990bc8d6f62&docnum=32&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=1cbd8ef90b68e79b19aae40720bdedb5" \l "n169" \t "_self) Nuclear power has only resulted directly in 31 deaths between 1970 and 1992, all of which occurred in the disaster at Chernobyl. [170](http://www.lexis.com/research/retrieve?_m=e88a2a9ca0791dfde3bc6990bc8d6f62&docnum=32&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=1cbd8ef90b68e79b19aae40720bdedb5" \l "n170" \t "_self) Statistically, nuclear power is one of the safest forms of power production. The most dramatic incidents involving energy production do not involve nuclear power at all. For example, at least 2,000 civilians died when the Machhu II Dam failed in India in 1979. [171](http://www.lexis.com/research/retrieve?_m=e88a2a9ca0791dfde3bc6990bc8d6f62&docnum=32&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=1cbd8ef90b68e79b19aae40720bdedb5" \l "n171" \t "_self) In addition, the 1984 explosion of a liquefied petroleum gas (LPG) storage tank in Mexico resulted in over five hundred deaths, two thousand injuries, and the evacuation of over two hundred thousand people. [172](http://www.lexis.com/research/retrieve?_m=e88a2a9ca0791dfde3bc6990bc8d6f62&docnum=32&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=1cbd8ef90b68e79b19aae40720bdedb5" \l "n172" \t "_self) The number of people killed and the total number of lives negatively affected by nuclear power is overwhelmingly dwarfed by accidents in other areas of the energy industry. [173](http://www.lexis.com/research/retrieve?_m=e88a2a9ca0791dfde3bc6990bc8d6f62&docnum=32&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=1cbd8ef90b68e79b19aae40720bdedb5" \l "n173" \t "_self)

#### 2. Meltdowns don’t cause lasting damage

Bosselman, 07 - Professor of Law Emeritus, Chicago-Kent College of Law (Fred, “The New Power Generation: Environmental Law and Electricity Innovation: Colloquium Article: The Ecological Advantages of Nuclear Power,” 15 N.Y.U. Envtl. L.J. 1, 2007)

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

#### 3. Radiation impacts are exaggerated – Chernobyl disproves.

Cravens, 07 – A published novelist who contributed op-eds to Harper’s Magazine, The New York Times, The Washington Post, and The New Yorker. (Gwyneth, The Power to Save the World, pg. 99-100)

UNSCEAR also found that "the accident had a large negative psy­chological impact on thousands of people." Fear, born of ignorance of real risk coupled with anxiety about imagined harm, fostered epidemics of psychosomatic illnesses and elective abortions-perhaps as many as 200,000-because of dread of genetic mutants. Long-standing anxiety about government directives was exacerbated by the actions of Soviet officials during the first two years after the incident. Better management of the emergency, including adequate dissemination of facts, probably could have prevented much of this psychic damage, which also plagues war veterans and people displaced by natural disasters like major hurri­canes and floods. "Most of the world community agreed that the conclusions were what had been expected," Mettler said. "The Russians were in agreement. But at first, Ukraine and Belarus went nuts and claimed that all sorts of other things were happening. When we presented the findings in Vienna in 1992, the Ukrainians said that rates of TB, measles, and other diseases had gone up. I asked then and there for their data, and added, 'And, oh, by the way, include your data from the years preceding Chernobyl.' I got some data and had it translated and showed it to the audience. Certain diseases were down, others were up. So that data didn't support the Ukrainians' blanket statements. There was a great deal of discussion of thyroid cancer and leukemia. The claim that cancer rates in general went up didn't cut it for us, for a number of reasons. As I said, those separate groups, one in Hiroshima and one London, independently analyzed the data and made the conclusions. The conclusions have been borne out and continue to be borne out. There’s been no change.

#### 4. Nature would adapt to deal with disturbances such as radiation leaks.

Bosselman, 07 - Professor of Law Emeritus, Chicago-Kent College of Law (Fred, “The New Power Generation: Environmental Law and Electricity Innovation: Colloquium Article: The Ecological Advantages of Nuclear Power,” 15 N.Y.U. Envtl. L.J. 1, 2007)

Ecologists today recognize that disturbance is a natural part of ecological processes. Ecological change caused by disturbance is not only inevitable but, within limits, necessary if ecological processes are to be maintained. This current view is a departure from much of the earlier ecological thinking, which assumed that each part of the world had a "climax" condition that in the aggregate created a static "balance of nature." 266 University of Illinois wildlife law expert Eric Freyfogle summarizes the importance of this change: "Ecologists now realize that the whole concept of community climax is misleading, for climaxes are always tentative and subject to being upset by a wide variety of natural forces, including fire, disease, and weather." 267 My colleague, Dan Tarlock, has chronicled how the science of "nonequilibrium" ecology emphasizes the important role that disturbance, such as wildfire, flood, or epidemic, plays in ecological processes. 268 Things our society has called "disasters" are not external to the ecological system but a vital part of it. 269 Disturbance can be seen as an inevitable ecological process and a  [\*50]  stabilizing factor that needs to be understood, 270 and "efforts to freeze or restore a static, pristine state" of nature are inappropriate "irrespective of whether the motive is to conserve nature, to exploit a resource for economic gain, to sustain recreation, or to facilitate development." 271

#### Multiple safety checks prevent the impact.

DOE 08 Department of Energy, 12/30, “Nuclear Safety” http://www.energy.gov/safetyhealth/nuclearsafety.htm

**The Department of Energy is committed to safe operation of its nuclear facilities and activities. To ensure safe operation, the Office of Health, Safety and Security's Office of Nuclear Safety, Quality Assurance and Environment establishes nuclear safety and environmental protection requirements and expectations for the Department to ensure protection of workers and the public from the hazards associated with nuclear operations, and protection of the environment from the hazards associated with all Department through a combination of public rules and DOE directives. We also work with non-government standards bodies to develop consensus standards that can be used to maintain and enhance the safety of our facilities and activities**. The overall goal in nuclear safety enforcement is to improve nuclear safety performance throughout the Department’s programs, sites and contractors. **Office of Price-Anderson Enforcement provides DOE corporate leadership for nuclear safety rule enforcement of the provisions of the Price-Anderson Amendments Act and execution of the enforcement program. This responsibility incorporates the congressional statutory mandate to apply sanctions for unsafe conditions that violate nuclear safety requirements for protecting workers and the public. Additional statutory responsibilities include enforcement of the Worker Safety and Health Program in the same manner that the nuclear safety rules are enforced**. One of the desired outcomes of this program is to promote pro-active behavior on the part of contractors with the goal, as stated above, of improving nuclear safety performance.

#### Meltdown fears are media hype and scare tactics.

Spiers, 2008 (Elizabeth, Founder of Dead Horse Media and dealbreaker.com, June 9, “The Case for Nukes”, Fortune Magazine, firstsearch) REQ

WHEN GOLDMAN SACHS analysts suggested last week that oil could hit $200 a barrel, I expected someone somewhere to express horror at the possibility. But the reaction was a tiny, resignation-filled sigh. Relentless fuel-price increases have so exhausted consumers that we don't have the energy to be outraged anymore. So we feel helpless as we watch oil sprint past the $130 mark on its way to price-prohibitive territory and wonder whether it's too late to bring back the horse and buggy. Our sense of helplessness is an illusion: There are things we can do. We got ourselves into this mess, mostly through multiple administrations of politically comfortable but shortsighted decision-making. And inasmuch as we're willing to stand a little political discomfort, we can get ourselves out. **One** uncomfortable **way to mitigate the energy crisis** has been under our nose since the 1950s: **nuclear energy. It's one of the cleanest** and most efficient **alternatives** to coal- and natural-gas-based electricity production, **and it's responsible for** less than **20% of** domestic **electricity production**. The most recent numbers (2006) indicate that coal-based production was the largest contributor, at 48%. Increasingly expensive petroleum and natural gas account for 22%. All three are replaceable. It may not be fashionable to suggest that the French know what they're doing with regard to anything but wine and cheese, but spend some time in Provence and note the remarkably clean air and cheap electricity, 75% of which is produced by nuclear power plants. Most of the plants were built after the 1970s oil shocks that sent France's economy into a tailspin because it was almost completely dependent on foreign oil, as we are now. Nuclear energy doesn't produce the air pollution that burning coal does, and **even waste products are recyclable**, though it hasn't been done thanks to an also potentially shortsighted Carter-era decision to ban it over fears of nuclear terrorism. Although the ban has been reversed, the fears still linger. But **irrational fear of improbable safety breaches is responsible for most opposition to nuclear power in this country. The unlikely culprit? Pop culture**. We've seen The China Syndrome, and **we worry that nuclear-reactor employees may be bumbling Homer Simpsons, capable of accidentally pushing the red button. Chernobyl and Three Mile Island -- the former of which killed 36 people and the latter of which killed none -- have become so outsized in the American imagination that our perception of actual risk has been completely distorted. We're willing to tolerate the health risks and environmental repercussions of other fuels to avoid the infinitesimally small and comically improbable possibility of a catastrophic accident** that resembles something out of a 1979 Jane Fonda movie, the likes of which have never happened in the history of nuclear power. We also cognitively associate nuclear power with bombmaking and having seen what atomic radiation can do to people; we think of it as being exponentially worse than exposure to fire, poisonous gases, and pollution -- the likely repercussions of large-scale accidents at conventional power plants. As with anything that's exotic, potentially dangerous, and little understood, it becomes more frightening in mythology. **Silhouettes of cooling towers** on the horizon **seem sinister because we've seen the imagery from Chernobyl -- an accident that was exacerbated because it was left burning for five days, which would never happen now**. Are there downsides? Yes. Nuclear waste has to be stored somewhere, and consistent with human behavior since the beginning of time, no one wants it in his own backyard. But at some point we have to weigh the necessity of energy independence against the cost of uncomfortable fixes like nuclear energy. As oil climbs to the point where no one can afford it and we're forced to stop buying it -- what Goldman analysts euphemistically call "demand destruction," as if it were intentional -- we may find that we have no choice. We can't afford to be afraid anymore.

### Heg

#### 1st, the Squo solves:

#### A. Leadership Now- Generation III+

Bipartisan Policy Center 12

[Co-chaired by Senator Pete Domenici and Dr. Warren F. “Pete” Miller, Maintaining U.S. Leadership in Global Nuclear Energy Markets A Report of the Bipartisan Policy Center’s Nuclear Initiative, July 2012, pg 6, <http://bipartisanpolicy.org/sites/default/files/Leadership%20in%20Nuclear%20Energy%20Markets.pdf>, \\wyo-bb]

Given this near-term expansion, the United States will continue to be a world leader in the development of advanced reactor technologies, including Generation III+ advanced passive reactors and SMRs. International interest in developing new nuclear-generating capacity, on the other hand, presents potentially substantial business opportunities for the domestic nuclear industry. Commercial nuclear exports generate obvious economic benefits for U.S. firms and for the nation’s overall balance of trade. Importantly, they also help the United States retain a major role in the evolution and maintenance of international nuclear safety and nonproliferation regimes. Other nations not only look to the U.S. industry for operational expertise, they see the NRC as setting the international gold standard for safety and physical security regulation. DOE’s National Nuclear Security Administration, meanwhile, has a great deal of influence over the nonproliferation aspects of international fuel-cycle issues.

#### 2nd, Nuke power hurts leadership:

#### A. Expanding nuclear power hurts credibility – safety issues

Walsh 11 (Wednesday, Mar 16, 2011 05:17 PM MST The nuclear credibility gap As Japan and U.S. officials differ on risks, the Obama administration pushes ahead with nuclear power expansion By Joan Walsh, http://www.salon.com/2011/03/17/nuclear\_credibility\_gap/)

I’m inclined to believe Jaczko, as well as warnings from U.S. Energy Secretary Steven Chu and other U.S. officials. Japanese leaders have been slow to admit the extent of the Fukushima damage at every step of the way. But American leaders are putting their own credibility at risk by being so quick to reiterate the Obama administration’s commitment to expanding nuclear power in the U.S. On Wednesday Chu told Congress that officials planned to look at the “lessons” of the Japan disaster — but he also told Rep. Joe Barton (R-Energy Industry) that the president continues to support expanding nuclear power in the U.S. at a cost to taxpayers of $36 billion, mainly in loan guarantees for new reactors, and to fund new small, modular reactors. To meet the president’s clean energy goals, Chu said, “We believe we will have to have some fraction coming from nuclear.” Without knowing the “lessons” of the unforeseen Japanese disaster, I’m not sure why any administration leader is making a full steam ahead commitment to nuclear expansion.

#### B. Government investment kills tech leadership – creates confusion in the industry.

Spencer and Loris, ‘11

(Jack (Senior Research Fellow, Nuclear Energy Policy at The Heritage Foundation) and Nicolas (Herbert and Joyce Morgan Fellow at The Heritage Foundation), “A Big Future for Small Nuclear Reactors?”, The Heritage Foundation, No. 2514, Backgrounder, 2-2-11, RSR)

Too many policymakers believe that Washington is equipped to guide the nuclear industry to success. So, instead of creating a stable regulatory environment where the market value of different nuclear technologies can determine their success and evolution, they choose to create programs to help industry succeed. Two recent Senate bills from the 111th Congress, the Nuclear Energy Research Initiative Improvement Act (S. 2052) and the Nuclear Power 2021 Act (S. 2812), are cases in point. Government intervention distorts the normal market processes that, if allowed to work, would yield the most efficient, cost-effective, and appropriate nuclear technologies. Instead, the federal government picks winners and losers through programs where bureaucrats and well-connected lobbyists decide which technologies are permitted, and provides capital subsidies that allow investors to ignore the systemic problems that drive risk and costs artificially high. This approach is especially detrimental to SMRs because subsidies to LWRs distort the relative benefit of other reactor designs by artificially lowering the cost and risk of a more mature technology that already dominates the marketplace.

#### C. New reactor types undermine nuclear conformity that’s key to tech leadership.

Lester and Rosner 9 (Richard and Robert, The growth of nuclear power: drivers & constraints, http://lion.chadwyck.com.ezproxy1.lib.asu.edu/searchFulltext.do?id=R04200587&divLevel=0&area=abell&forward=critref\_ft)

In its earliest years, the nuclear power industry also seemed destined to develop along many different trajectories. Nuclear power reactor developers in Canada, the United Kingdom, France, the Soviet Union, Japan, and the United States each introduced a different type of nuclear power reactor technology. National strategies for the nuclear fuel cycle also differed significantly. Eventually, the light water reactor technology that was first introduced in the United States came to dominate the global nuclear power industry. Light water reactors now account for more than 90 percent of installed nuclear capacity worldwide, although today the leading suppliers of this technology are French and Japanese. (The only other power reactor technology with a significant market presence internationally has historically been the Canadian CANDU design.) There is today a fairly high degree of uniformity in the nuclear plans and programs of most of the major nuclear countries, and nuclear power is one of the most highly globalized of all industries. The nuclear power plant supply industry is dominated by a small number of large global suppliers of light water reactor equipment and technology. National regulatory standards and practices are harmonized to a substantial degree. National strategies for the nuclear fuel cycle are also aligned, and major fuel cycle service providers operate globally. And a new class of global nuclear power plant investor-operators is emerging, led by the French utility EDF, whose joint ventures with nuclear power companies in China and the United States, and its recent purchase of the U.K. nuclear operator British Energy, have established it as an important player in all of the world's largest nuclear power markets. This global convergence has yielded a number of benefits, including economies of scale and accelerated learning. The case for international coordination and standardization of strategies and practices is further strengthened by the special care with which nuclear technology and materials must be handled, and the international consequences of local nuclear accidents or missteps. From time to time this strategic convergence has also served the purposes of nuclear industry leaders and government policymakers, providing them with a sort of strength-in-numbers defense against local critics. A few years ago, when President George W. Bush announced his support for closing the nuclear fuel cycle in the United States, the new policy was welcomed by the French, British, and Japanese, in no small part because it seemed to legitimize their own longstanding commitment to a closed nuclear fuel cycle, including reprocessing and mixed-oxide fuel use. Thirty years earlier, when the United States abandoned its plans to reprocess spent nuclear fuel and sought to persuade others to do likewise as a nonproliferation measure, the outraged reactions from Europe and Japan were partly stimulated by a fear that the American policy reversal would give ammunition to domestic critics of their own reprocessing plans, which they had no intention of abandoning. The attractions of nuclear conformity remain strong today, yet the prospect of divergent development pathways may now be greater than at any time since the earliest days of the nuclear power industry. What are the implications of this for nuclear energy growth? How might it affect the course of international nonproliferation efforts?

#### 3rd, the plan can’t solve:

#### A. Can’t Solve US Nuclear Leadership Protesters halt licensing while Competitors build away- Toshiba, Koreans, and Russians

Tucker 10

[William Tucker, The American Spectator Correspondent, “Nuclear Renaissance blossoms--without the USA: the world is going nuclear while we're going nowhere”, (Oct. 2010): p18., Academic OneFile. Web. 23 Aug. 2012, Academic OneFile. Web. 23 Aug. 2012., \\wyo-bb]

Yet the blame does not lie solely with the NRC. To a loud and vocal portion of the population, nuclear technology is still the devil's work, while only a few mandates and government subsidies stand between us and a world powered by wind and sunshine. In mid-July Jaczko braved a trip to Brattleboro, Vermont, where he broke bread with nearly 100 anti-nuclear crusaders trying to shut down Vermont Yankee, the 660-megawatt reactor that supplies one-third of the Green Mountain State's electricity. The crowd was the usual collection of pony-tailed men in business suits, eager young lawyers from the Nader-ite Public Interest Research Group, and well-heeled, gray-haired women who can't imagine why anyone would ever fool with nuclear power. Their verdict was unanimous: "Shut it down this afternoon!" Jaczko, of course, was accused of giving the nuclear industry a free pass and "not listening to the people." Faced with these pressures, the NRC responds by regulating the industry into the ground. Only one new reactor--the Vogtle Plant in Georgia--has received permission to begin site preparation for construction. Last July the NRC informed the utility, Southern Electric, that the dirt it was using to grade the site was inadequate. Southern was forced to go further abroad and spend more money on better dirt. Two weeks later the NRC shut down the project entirely when it discovered that a subcontractor had only asked prospective employees about drug and alcohol in interviews but failed to secure statements in writing. Work halted for three weeks. It is easy to see where this is going. If the NRC ever issues a construction license, the builder will be second-guessed on every rivet until the project is years behind schedule and $5 billion over budget. That will prove, once again, that nuclear is "too expensive to be built in this country." Meanwhile, China and Japan are building their reactors in less than four years for $5 billion. To the swift goes the race. SIX MONTHS AGO, Secretary of Energy Steven Chu electrified the industry by suggesting in a Wall Street Journal editorial that the U.S. might find a niche in building small modular reactors--something about the size of a gazebo--that can be buried in the ground and power a town of 20,000 while running for 20 years without refueling. Both Babcock & Wilcox and a California company named Hyperion have designs. Moving in this direction could break the logjam at the NRC and offer utilities bite-sized projects that would not require them to risk their entire net worth. Yet Hyperion already enquired about a license application at the NRC in 2006 and was told to go away--the Commission didn't have time for such small potatoes. (License applicants must pay the entire cost of the process, which means an investment of tens of millions.) Meanwhile, the dream that the U.S. might regain some technological lead is already fading. Toshiba has a mini-reactor it has been trying for years to sell to Galena, Alaska, an isolated village entirely dependent on diesel imports. The Russians are outfitting small reactors on barges and floating them into Siberian coastal villages. Then three months after Chu's op-ed, the Koreans announced they would also enter the field with their own mini-reactor. The idea that American companies, lumbering along under supervision of the NRC, can compete in this vigorous international market is already evaporating. So the world is going nuclear without our help.

#### , A MULTIPOLAR ERA WON’T BE LIKE WWI BALANCE OF POWER-deterrence

Kupchan in ‘2

[Charles Professor of International Relations @ Georgetown, The End of the American Era: US Foreign Policy and the Geopolitics of the 21st Century, Alfred A. Knopf, New York //wyo-tjc]

ALTHOUGH THE FUTURE holds in store a competitive world of multi­ple centers of power, the coming era of multipolarity will likely have its own unique characteristics and may resemble only distantly its his­torical antecedents. Much has changed in the recent past to provide optimism that the era that is opening will be less bloody than the one that is closing. Nations no longer have the same incentives to engage in predatory conquest. They now accumulate wealth through devel oping information technology and expanding financial services, not conquering and annexing land and labor. Nuclear weapons also increase the costs of war. And democratic states may well be less aggressive than their authoritarian ancestors; democracies seem not to go to war with each other. Perhaps future poles of power, as long as they are democratic, will live comfortably alongside each other. In this sense, the end of the American era does not represent a turning back to the traditional balance-of power system of, say Europe before World War I. Rather it signifies a turning forward to a new and uncharted historical era that will be guided by a new set of underlying forces and new rules of the game. Francis Fukuyama is therefore right to assert that the collapse of the Soviet Union and the triumph of liberal democracy constitute a historical end point. The closing of the current era will mark not just the end of American pri­macy, but also the end of a particular historical epoch—that of indus­trial capitalism, liberal democracy and the nation-state. America has in many respects been at the forefront of each of these defining char­acteristics of the contemporary era. And it has admirably succeeded in completing or at least bringing to their most elevated form each of these grand historical projects. [P. 34-35]