### Case

#### The aff solves – market demand for uranium results in new extraction methods

**Gradey,** **9** – President and CEO of Cameco Corporation (Gerald, 4/20. "Beyond Fossil Fuels: Gerald Grandey on Nuclear Power." http://www.scientificamerican.com/article.cfm?id=energy-grandey-cameco)

What technical obstacles currently most curtail the growth of nuclear fission? What are the prospects for overcoming them in the near future and the longer-term? Whenever there is a discussion about nuclear power, the question arises about the sustainability of the uranium supply. Critics observe that resources are limited and, at present consumption rates, would be depleted in 50 to 100 years. The dialogue ignores the reality of mineral resource development. Whether it is copper, gold, silver or uranium, private industry invests in exploration and new discoveries only in response to favorable price expectations and only a few decades ahead of need. Uranium is a relatively abundant element in the earth's crust, and yet, because the use for uranium only came about relatively recently, much of the earth remains unexplored. This is particularly true with respect to exploration using modern geophysical tools and geologic models of ore occurrence. Low prices for uranium in the 1980s and 1990s meant very little exploration. With the increasing prices of the last five years, this has changed and many new discoveries are being made. Thus, it is likely that known resources will expand by many factors and will not present a limit to the growth of nuclear fission. In the final analysis, there is an almost inexhaustible supply of uranium in seawater. Pilot extraction has been done and someday will be cost-competitive to land-based resources. Are there obstacles to scaling up nuclear power to serve an even larger national or global customer base? Again, from a uranium supplier's perspective, the length of time to locate, develop and commence the commercial operation of a uranium deposit is similar to the lead time for licensing and constructing a nuclear power plant. New construction is highly visible to the industry, and as nuclear power is scaled up, there will be ample time to ramp up uranium production and fuel fabrication to meet the growing demand. Can the existing energy infrastructure handle growth in nuclear? Or does that, too, need further modification? As new nuclear plants come online, the fuel infrastructure will have to be in place approximately three years in advance. Plant operators will begin ordering fuel well ahead of commercial operation and will generally want long-term contracts to provide fuel cost stability. At first, existing infrastructure will be expanded, but as the renaissance accelerates, new conversion, enrichment and fabrication plants will be built—some with new or evolutionary technology with lower emissions and environmental impact. Already we see facility expansion and new enrichment plant construction in anticipation of the first wave of new plants.

#### Cheap natural gas won’t block SMR commercialization

**Marston 12** (Theodore U. Marston PHD. – Principal @ Marston Consulting Board of Managers, Idaho National Laboratory Formerly DOE NERAC Generation IV Oversight Committee 2001-2002)

(March 2012, “Status of Small Modular Light Water Reactors in the US” in “The Nuclear Decarbonization Option: Profiles of Selected Advanced Reactor Technologies”

The primary economic challenge to the commercialization of smLWRs is whether the electricity production costs are (1) affordable and (2) competitive with other forms of generation. With regard to affordability, smLWRs offer potential optionality to the US electric utilities, when the only real options for large generation additions are gas fired, coal fired or large nuclear plants. SmLWRs, being smaller and modular, potentially offer a more manageable nuclear option. SmLWRs are more ‘affordable’, i.e. less of a fiscal risk. They can be deployed in much smaller increments, matching the utilities’ load growths better and reduce the ‘single shaft’ generation risk to an acceptable level. Competing with other forms of electricity generation is a much greater challenge today. Vast amounts of natural gas are being discovered across the US in so-called tight gas (shale) deposits, resulting in cheap and abundant natural gas. The current spot market price of natural gas is less than $3.00/MMBTU. Carbon restraints (taxes or credits), which would improve the competitiveness of smLWRs, appear unlikely to arise in the near future. However it is expected that carbon emissions from large stationary sources will be reduced systematically over time one way or another, and US utilities are very interested in reducing their ‘carbon footprints’. If the economics of the smLWRs are what some of the designs claim, there is a real chance to compete with natural gas fired plants, particularly when carbon constraints are in place. The cost competitiveness of smLWR depend heavily on achieving the following opportunities: l Streamline design and manufacturing are necessary to offset the economies of scale of other generation options, particularly nuclear plants. ALWRs are becoming larger and larger due to the economies of scale. The only prospect to reverse this effect for the smaller smLWRs is to streamline the shop fabrication of the NSSS and other modules, ship them to the site and install them rapidly. The requisite quality standards must be maintained throughout the entire process. l Modularity of the smLWRs provides the opportunity to transform how we design, build, operate and decommission nuclear power plants. l Reduce construction time by modularization and construction efficiencies l SMRs do not require loan guarantees. This sets the smLWR apart from the larger ALWR, which currently benefit from federal loan guarantees, especially for regulated utilities. Experience shows the loan guarantee process to be a protracted and expensive affair, requiring the expenditure of significant political and fiscal capital.

### 2AC: T – Pre-Existing

#### We meet – nuke power is preexisting and incentives increase in the squo we just make it more appealing to investors

#### CI - Increase is to add to

Dictionary.com 6 (Dictionary.com: definitions, 11/3/2006, dictionary.reference.com, DA 6/21/11, OST)

**To make greater, as in number, size**, strength, or quality; augment; add to: to increase taxes.

#### We meet – we add to the amount of incentives in the squo

#### “Increase” doesn’t require prior existence

**Reinhardt 5** (U.S. Judge for the UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT (Stephen, JASON RAY REYNOLDS; MATTHEW RAUSCH, Plaintiffs-Appellants, v. HARTFORD FINANCIAL SERVICES GROUP, INC.; HARTFORD FIRE INSURANCE COMPANY, Defendants-Appellees., lexis)

Specifically, we must decide whether charging a higher price for initial insurance than the insured would otherwise have been charged because of information in a consumer credit report constitutes an "increase in any charge" within the meaning of FCRA. First, we examine the definitions of "increase" and "charge." Hartford Fire contends that, limited to their ordinary definitions, these words apply only when a consumer has previously been charged for insurance and that charge has thereafter been increased by the insurer. The phrase, "has previously been charged," as used by Hartford, refers not only to a rate that the consumer has previously paid for insurance but also to a rate that the consumer has previously been quoted, even if that rate was increased [\*\*23] before the consumer made any payment. Reynolds disagrees, asserting that, under [\*1091] the ordinary definition of the term, an increase in a charge also occurs whenever an insurer charges a higher rate than it would otherwise have charged because of any factor--such as adverse credit information, age, or driving record 8 --regardless of whether the customer was previously charged some other rate. According to Reynolds, he was charged an increased rate because of his credit rating when he was compelled to pay a rate higher than the premium rate because he failed to obtain a high insurance score. Thus, he argues, the definitions of "increase" and "charge" encompass the insurance companies' practice. Reynolds is correct. “Increase" means to make something greater. See, e.g., OXFORD ENGLISH DICTIONARY (2d ed. 1989) ("The action, process, or fact of becoming or making greater; augmentation, growth, enlargement, extension."); WEBSTER'S NEW WORLD DICTIONARY OF AMERICAN ENGLISH (3d college ed. 1988) (defining "increase" as "growth, enlargement, etc[.]"). "Charge" means the price demanded for goods or services. See, e.g., OXFORD ENGLISH DICTIONARY (2d ed. 1989) ("The price required or demanded for service rendered, or (less usually) for goods supplied."); WEBSTER'S NEW WORLD DICTIONARY OF AMERICAN ENGLISH (3d college ed. 1988) ("The cost or price of an article, service, etc."). Nothing in the definition of these words implies that the term "increase in any charge for" should be limited to cases in which a company raises the rate that an individual has previously been charged.

#### It’s arbitrary – even if an aff is pre-existence they could say that the Aff doesn’t pre-exist enough so they can constantly shift the bar to not let us meet

#### Resonablity- our interpretation provides predictable limits and fair ground. Competeing interpretations is just a race to the most limiting definition – it’s in the literature especially for SMRs

### 2AC – Solar CP

#### Doesn’t solve DoD – Andres and Breetz indicate that renewables like solar can’t maintain grid sustainability and would cause blackouts on military bases

#### More evidence that solar sucks for the military

Andres and Breetz 11 [Richard Andres, Professor of National Security Strategy at the National War College and a Senior Fellow and Energy and Environmental Security and Policy Chair in the Center for Strategic Research, Institute for National Strategic Studies, at the National Defense University, and Hanna Breetz, doctoral candidate in the Department of Political Science at The Massachusetts Institute of Technology, Small Nuclear Reactors for Military Installations: Capabilities, Costs, and Technological Implications, [www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf](http://www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf)]

#### Nevertheless, attempts to solve the current energy use problem with efficiency measures and renewable sources are unlikely to fully address this vulnerability. Wind, solar, and hydro generation along with tailored cuts of energy use in the field can reduce the number of convoys needed to supply troops, but these measures will quickly reach limits and have their own challenges, such as visibility, open exposure, and intermittency

#### Doesn’t solve warming – can’t come online fast enough and only we solve global transition to carbonfree tech – that’s the solan evidence

#### Solar can’t solve warming

Post 12 -- BSME New Jersey Institute of Technology, MSME Rensselaer Polytechnic Institute, MBA, University of Connecticut. P.E. Connecticut. Consulting Engineer and Project Manager (Willem, 7/1/12, "Wind Energy CO2 Emissions Reductions are Overstated," http://theenergycollective.com/node/89476)

Solar energy is variable (during a day and during variable cloudiness) and intermittent; usually it is minimal in the morning, maximal at noon about 3-5 hours before the daily peak demand, minimal in the afternoon, minimal during foggy, overcast, snowy days, and zero at night. About 65-70 percent of the hours of a year solar energy is near zero, and it cannot be turned off, as in Southern Germany with about 1 million PV systems, when on sunny summer days solar energy surges to about 12,000 MW to 14,000 MW and has to be partially exported to France and the Czech Republic at fire sale prices, 5.5 euro cent/kWh or less, after having been subsidized at an average of about 50 euro cent/kWh. Example: German solar power is as little as 2% of rated capacity, or 340 MW, on cloudy days and when snow covers the panels. This means there are many hours during a year when no wind or solar energy is generated. Therefore, all conventional generator units will need to be kept in good operating condition, AND staffed 24/7/365, AND fueled to serve the daily demand when wind and solar energy is near zero. Without utility-scale energy storage, wind turbines and solar systems cannot replace any conventional units. All the units that would be needed WITHOUT the existence of wind turbines and solar systems, would also be needed WITH the existence of wind turbines and solar systems. Some of the conventional units would have less energy production with wind and solar energy on the grid, thereby adversely affecting their economics, due to increasingly inefficient start/stop, part-load and part-load-ramping operations, but without wind and solar energy on the grid, the energy production of almost all the conventional units would be needed to serve the daily demand. Building Wind Turbines Everywhere?: There are some (mostly wind turbine vendors, project developers, trade organizations, NRELs, financial types setting up LLC tax shelters for the top 1% of households, etc.) who say that building wind turbines everywhere there is wind, and connecting all of them with a national HVDC overlay grid into a super grid (similar to the US Interstate Highway System overlaying state and local roads), the variation and intermittency of wind energy in the diverse geographical areas will largely be canceling each other out so that the overall energy production will become increasingly steadier as more wind turbines are connected to the super grid, and that therefore there will be little need for balancing plants, and that there will always be wind energy somewhere no matter what the weather conditions in one or more geographical areas. Several National Renewable Energy Laboratories and other entities have made studies of this scheme, using mathematical modeling, as described in the EWITS and NEWITS reports. However, someone went one step further and combined the outputs of 5 widely dispersed geographical areas: - Bonneville Power Administration, which serves 3.5 GW of installed capacity in the Pacific Northwest - The Australian Energy Market Operator, which serves 1.8 GW of installed capacity in New South Wales - The Independent Electricity System Operator, which serves 1.2 GW of installed capacity in Ontario - The Alberta Electric System Operator, which serves 0.8 GW of installed capacity in Alberta - http://www.eirgrid.com/operations/systemperformancedata/windgeneration/ EirGrid, which serves 1.4 GW of installed capacity in Ireland The result of the analysis is described in this article which concludes geographical dispersion of wind turbines does not reduce the variation and intermittency of wind energy. http://www.ethiopianreview.com/business/122605 A French energy systems analyst, Hubert Flocard, combined the wind energy outputs of several European nations. The results of his analysis yielded the same conclusion. http://www.dimwatt.eu/index.php/our-campaigns/keeping-the-lights-on/documents/108-ground-breaking-french-study-should-stop-further-expenses-on-the-so-called-super-grid Energy Cost Projections The US Energy Information Administration projects levelized production costs (national averages, excluding subsidies) of NEW plants coming on line in 2016 as follows (2009$) : Offshore wind $0.243/kWh, PV solar $0.211/kWh (higher in marginal solar areas, such as New England), Onshore wind $0.096/kWh (higher in marginal wind areas with greater capital and O&M costs, such as on ridge lines in New England), Conventional coal (base-loaded) $0.095/kWh, Advanced CCGT (base-loaded) $0.0631/kWh. http://www.energytransition.msu.edu/documents/ipu\_eia\_electricity\_generation\_estimates\_2011.pdf IS WIND ENERGY GOOD ENERGY POLICY? Within federal, state and local governments tens of thousands of people are busying themselves promoting renewables by with holding meetings and public hearings, preparing studies, writing reports, energy plans, laws, rules and regulations, monitoring projects for compliance, etc. Outside of government wind turbine vendors (Siemens, GE, Vestas, Iberdrola, etc,), project developers/owners, financiers managing tax shelters, trade organizations, etc., are busying themselves popularizing wind energy as saving the planet from global warming with PR campaigns that claim there would be significant reductions of fossil fuel consumption and CO2 reductions/kWh, that capital costs/MW would decrease, and that wind energy costs/kWh would be at grid parity in the near future. These claims have largely not been realized. Global Warming is a Given: A just-released report from EIA shows the actual world energy consumption data and projected consumption data for the 1990 to 2035 period. The report shows world energy consumption is estimated to increase from 505 quads in 2008 to 770 quads in 2035, a 52% increase. The biggest part of the increase is by (non-OECD nations + Asia). http://www.eia.gov/forecasts/ieo/world.cfm See spreadsheet associated with figure 12 World energy consumption by fuel (quadrillion Btu) Liquids: From 173.2 in 2010 to 225.1 in 2035; 30% more Natural gas: 116.7 to 174.7; 50% more Coal: 149.4 to 209.1; 49% more Nuclear: 27.6 to 51.2; 86% more Renewables: 55.2 to 109.5; 98% more Renewables fraction of total consumption: From 10.6% in 2010 to 15.2% in 2035 Fossil fraction of total consumption: 84.1% to 79.1% The significant increase in projected fossil fuel consumption during the next 24 years means global warming will continue unabated, because (non-OECD + ASIA) will have energy consumption growth far outpacing the energy consumption growth of the rest of the world; i.e., global warming is a given. The above indicates the enormous investments required to achieve the 2035 projected renewables energy production would have practically no benefit regarding global warming.

#### Perm do both - Double bind - CP links to elections because of things like Solyndra, and if it doesn’t it’ll shield the unpopularity of nuke power and framed as an all of the above energy strategy

#### Condo is a voter- results in argument irresponsibility, time and strat skews- no cost options in the 1nc make the 2ac impossible- 1 solves your offense, econ con

### 2AC – K

The framework for the debate is whether or not the plan is better than the status quo or a competitive policy option - this is critical to predictability, education and teaching opportunity cost. The use of non-competitive agents without specific plans for implementation make it impossible to get offense - kills clash and education.

2. Capitalism is inevitable – their alternative caricaturizes the left and cedes the political sphere to the right.

**Wilson 1** [John K. Wilson, best-selling progressive author and coordinator of the Independent Press Association’s Campus Journalism Project, 200. How the Left Can Win Arguments and Influence People: A Tactical Manual for Pragmatic Progressives, Published by NYU Press, ISBN 0814793630, p. 15-16]

Capitalism is far too ingrained in American life to eliminate. If you go into the most impoverished areas of America, you will find that the people who live there are not seeking government control over factories or even more social welfare programs; they're hoping, usually in vain, for a fair chance to share in the capitalist wealth. The poor do not pray for socialism—they strive to be a part of the capitalist system. They want jobs, they want to start businesses, and they want to make money and be successful. What's wrong with America is not capitalism as a system but capitalism as a religion. We worship the accumulation of wealth and treat the horrible inequality between rich and poor as if it were an act of God. Worst of all, we allow the government to exacerbate the financial divide by favoring the wealthy: go anywhere in America, and compare a rich suburb with a poor town—the city services, schools, parks, and practically everything else will be better financed in the place populated by rich people. The aim is not to overthrow capitalism but to overhaul it. Give it a social-justice tune-up, make it more efficient, get the economic engine to hit on all cylinders for everybody, and stop putting out so many environmentally hazardous substances. To some people, this goal means selling out leftist ideals for the sake of capitalism. But the right thrives on having an [end page 15] ineffective opposition. The Revolutionary Communist Party helps stabilize the "free market" capitalist system by making it seem as if the only alternative to free-market capitalism is a return to Stalinism. Prospective activists for change are instead channeled into pointless discussions about the revolutionary potential of the proletariat. Instead of working to persuade people to accept progressive ideas, the far left talks to itself (which may be a blessing, given the way it communicates) and tries to sell copies of the *Socialist Worker* to an uninterested public.

3. No link – the plan has no profit motive or produces any economic gain - it’s only used for military grid involvement and solving emissions for warming

4. Cap’s not the root cause

**Aberdeen, 03** (Richard, “THE WAY: A Theory of Root Cause and Solution”, http://richardaberdeen.com/essays/Etheway.html)

A view shared by many modern activists is that capitalism, free enterprise, multi-national corporations and globalization are the primary cause of the current global Human Rights problem and that by striving to change or eliminate these, the root problem of what ills the modern world is being addressed.  This is a rather unfortunate and historically myopic view, reminiscent of early “class struggle” Marxists who soon resorted to violence as a means to achieve rather questionable ends.  And like these often brutal early Marxists, modern anarchists who resort to violence to solve the problem are walking upside down and backwards, adding to rather than correcting, both the immediate and long-term Human Rights problem.  Violent revolution, including our own American revolution, becomes a breeding ground for poverty, disease, starvation and often mass oppression leading to future violence. Large, publicly traded corporations are created by individuals or groups of individuals, operated by individuals and made up of individual and/or group investors.  These business enterprises are deliberately structured to be empowered by individual (or group) investor greed.  For example, a theorized ‘need’ for offering salaries much higher than is necessary to secure competent leadership (often resulting in corrupt and entirely incompetent leadership), lowering wages more than is fair and equitable and scaling back of often hard fought for benefits, is sold to stockholders as being in the best interest of the bottom-line market value and thus, in the best economic interests of individual investors.  Likewise, major political and corporate exploitation of third-world nations is rooted in the individual and joint greed of corporate investors and others who stand to profit from such exploitation.  More than just investor greed, corporations are driven by the greed of all those involved, including individuals outside the enterprise itself who profit indirectly from it. If one examines “the course of human events” closely, it can correctly be surmised that the “root” cause of humanity’s problems comes from individual human greed and similar negative individual motivation.  The Marx/Engles view of history being a “class” struggle ¹  does not address the root problem and is thus fundamentally flawed from a true historical perspective (see Gallo Brothers for more details).  So-called “classes” of people, unions, corporations and political groups are made up of individuals who support the particular group or organizational position based on their own individual needs, greed and desires and thus, an apparent “class struggle” in reality, is an extension of individual motivation.  Likewise, nations engage in wars of aggression, not because capitalism or classes of society are at root cause, but because individual members of a society are individually convinced that it is in their own economic survival best interest.  War, poverty, starvation and lack of Human and Civil Rights have existed on our planet since long before the rise of modern capitalism, free enterprise and multi-national corporation avarice, thus the root problem obviously goes deeper than this.

5. Perm do both

6. Total rejection of capitalism fragments resistance – the alternative never solves

J.K. **Gibson-Graham 96**, Katherine Gibson and Julie Graham, Feminist Economic Geographers at the Australian National University in Canberra and University of Massachusetts Amherst, Authors of A Postcapitalist Class and Class and Its Others, 1996

[“End of Capitalism (As We Knew It): A Feminist Critique of Political Economy”, University of Minnesota Press, ISBN 0-8166-4805-0]

**One of our goals as Marxists has been to produce a knowledge of capitalism. Yet as “that which is known,”** Capitalism has become the intimate enemy. We have uncloaked the ideologically-clothed, obscure monster, but we have installed a naked and visible monster in its place. In return for our labors of creation, the monster has robbed us of all force**. We hear – and find it easy to believe – that the left is in disarray. Part of what produces the disarray of the left is the vision of what the left is arrayed against.** When capitalism is represented as a unified system coextensive with the nation or even the world, when it is portrayed as crowding out all other economic forms, when it is allowed to define entire societies, it becomes something that can only be defeated and replaced by a mass collective movement **(or by a process of systemic dissolution that such a movement might assist).** The revolutionary task of replacing capitalism now seems outmoded and unrealistic, yet we do not seem to have an alternative conception of class transformation to take its place. **The old political economic “systems” and “structures” that call forth a vision of revolution as systemic replacement still seem to be dominant in the Marxist political imagination. The New World Order is often represented as political fragmentation founded upon economic unification. In this vision the economy appears as the last stronghold of unity and singularity in a world of diversity and plurality. But why can’t the economy be fragmented too? If we theorized it as fragmented in the United States, we could being to see a huge state sector (incorporating a variety of forms of appropriation of surplus labor), a very large sector of self-employed and family-based producers (most noncapitalist), a huge household sector (again, quite various in terms of forms of exploitation, with some households moving towards communal or collective appropriation and others operating in a traditional mode in which one adult appropriates surplus labor from another). None of these things is easy to see.** If capitalism takes up the available social space, there’s no room for anything else. If capitalism cannot coexist, there’s no possibility of anything else. If capitalism functions as a unity, it cannot be partially or locally replaced. My intent is to help create the discursive conception under which socialist or other noncapitalist construction becomes “realistic” present activity rather than a ludicrous or utopian goal. To achieve this I must smash Capitalism and see it in a thousand pieces**. I must make its unity a fantasy, visible as a denial of diversity and change.**

Perm do the plan and reject all other instances of capitalism

7. Transitioning away from capitalism would collapse civilization and kill billions.

**Rockwell 8** [Llewellyn H. Rockwell, Jr., President of the Ludwig von Mises Institute, 2008 [“Everything You Love You Owe to Capitalism,” Ludwig von Mises Institute, May 18th, Available Online at http://mises.org/story/2982, Accessed 10-04-2008 ]

Whatever the specifics of the case in question, socialism always means overriding the free decisions of individuals and replacing that capacity for decision making with an overarching plan by the state. Taken far enough, this mode of thought won't just spell an end to opulent lunches. It will mean the end of what we all know as civilization itself. It would plunge us back to a primitive state of existence, living off hunting and gathering in a world with little art, music, leisure, or charity. Nor is any form of socialism capable of providing for the needs of the world's six billion people, so the population would shrink dramatically and quickly and in a manner that would make every human horror ever known seem mild by comparison. Nor is it possible to divorce socialism from totalitarianism, because if you are serious about ending private ownership of the means of production, you have to be serious about ending freedom and creativity too. You will have to make the whole of society, or what is left of it, into a prison. In short, the wish for socialism is a wish for unparalleled human evil. If we really understood this, no one would express casual support for it in polite company. It would be like saying, you know, there is really something to be said for malaria and typhoid and dropping atom bombs on millions of innocents.

8. Capitalism best ensures value to life

**Tracinski 8** Robert, editor of the Intellectual Activist, The Moral and the Practical,http://www.moraldefense.com/Philosophy/Essays/The\_Moral\_and\_the\_Practical.htm

Stated in more fundamental terms, capitalism is practical because it relies on the inexhaustible motive-power of self-interest. Under capitalism, people are driven by loyalty to their own goals and by the ambition to improve their lives. They are driven by the idea that one's own life is an irreplaceable value not to be sacrificed or wasted. But this is also a crucial moral principle: the principle that each man is an end in himself, not a mere cog in the collective machine to be exploited for the ends of others. Most of today's intellectuals reflexively condemn self-interest; yet this is the same quality enshrined by our nation's founders when they proclaimed the individual's right to "the pursuit of happiness." It is only capitalism that recognizes this right. The fundamental characteristics that make capitalism practical—its respect for the freedom of the mind and for the sanctity of the individual—are also profound moral ideals. This is the answer to the dilemma of the moral vs. the practical. The answer is that capitalism is a system of virtue—the virtues of rational thought, productive work, and pride in the value of one's own person. The reward for these virtues—and for the political system that protects and encourages them—is an ever-increasing wealth and prosperity

9. Capitalism promotes peace and solves global war

Bernstein 2 **(Andrew, Senior Writer for the Ayn Rand Institute and Ph.D. in Philosophy, “The Nobel Peace Prize Should Go to Those Who Really Support Peace”, October 11, http://www.aynrand.org/site/News2?page=NewsArticle&id=5453)**

If one admires men who cause war, one will ignore or vilify men who promote peace. Those who respect and support individual rights and political/economic freedom are the only true lovers of peace. Private capitalists and businessmen are outstanding examples. Business requires the barring of the initiation of force. Businessmen deal with one another peacefully, by means of trade, persuasion and voluntary contracts and agreements. Because businessmen respect the rights of all individuals, they have helped liberate the best minds to innovate, invent and advance, and thereby helped produce great general prosperity and peace. By helping to spread free trade across the globe, they have created peaceful relations among the individuals of many nations. Yet perversely, capitalists are denounced as exploiters of man. If we sincerely seek to attain the inestimable value that is world peace, it is individual rights and therefore capitalism that we must endorse. Capitalism is the only political-economic system that protects individual rights by banning the initiation of force. As Ayn Rand observed, it was capitalism that gave mankind its longest period of peace--an era in which there were no wars involving the entire civilized world--from the end of the Napoleonic Wars in 1815 to the outbreak of World War I in 1914. If we truly want to recognize and promote the cause of peace, let us award a peace prize to Capitalism

Capitalism is the only system capable of having environmental movements – The alternative will re-create governments that cause environmental catastrophe

**Rozak 92** [Theodore Roszak, Professor emeritus of history at California State University, 1992 [“The Voice of the Earth,” p. 34]

As destructive as the market economics have been in their treatment of the environment, we now know that the social economies have an even worse history**.** Glasnost has revealed a blasted landscape stretching from the Danube to the Bering Sea. As far as we know,no one spoke out against the devastation; few knew it was taking place. It is not that socialism inherently more anti-environmental than capitalism; rather its political organization has been far more effective in beating down all forms of resistance to centralized power. Left-wing politics, born to a hard, exclusive, and angry focus on issues of social justice,never encouraged the creation of an environmental agenda; worse still, the dictatorial methods of its leaders never allowed others freedom to take up the cause. A society like Stalin’s Russia, willing to exterminate its own people by the million, was hardly apt to fret for the well-being of the nation's lakes and forests.In contrast, the capitalist West has provided sufficient pluralistic space to allow an environmental movement to must effective resistance. In a world of harsh political realities and imperfect choices, this is no small virtue. Making use of that pluralism to open a searching, worldwide reappraisal of urban-industrial values is one of the great environmental benefits we stand to gain from the end of the cold war.If the Earth can be said to have an interest in our ideological contretemps, this is it.

That causes extinction

**Coyne and Hoekstra, 07 -** Professor in the Department of Ecology and Evolution at the University of Chicago and Associate Professor in the Department of Organismic and Evolutionary Biology at Harvard University (Jerry and Hopi, The New Republic, “The Greatest Dying,” 9/24, http://www.truthout.org/article/jerry-coyne-and-hopi-e-hoekstra-the-greatest-dying)

Every year, up to 30,000 species disappear due to human activity alone. At this rate, we could lose half of Earth's species in this century. And, unlike with previous extinctions, there's no hope that biodiversity will ever recover, since the cause of the decimation - us - is here to stay.     To scientists, this is an unparalleled calamity, far more severe than global warming, which is, after all, only one of many threats to biodiversity. Yet global warming gets far more press. Why? One reason is that, while the increase in temperature is easy to document, the decrease of species is not. Biologists don't know, for example, exactly how many species exist on Earth. Estimates range widely, from three million to more than 50 million, and that doesn't count microbes, critical (albeit invisible) components of ecosystems. We're not certain about the rate of extinction, either; how could we be, since the vast majority of species have yet to be described? We're even less sure how the loss of some species will affect the ecosystems in which they're embedded, since the intricate connection between organisms means that the loss of a single species can ramify unpredictably.     But we do know some things. Tropical rainforests are disappearing at a rate of 2 percent per year. Populations of most large fish are down to only 10 percent of what they were in 1950. Many primates and all the great apes - our closest relatives - are nearly gone from the wild.     And we know that extinction and global warming act synergistically. Extinction exacerbates global warming: By burning rainforests, we're not only polluting the atmosphere with carbon dioxide (a major greenhouse gas) but destroying the very plants that can remove this gas from the air. Conversely, global warming increases extinction, both directly (killing corals) and indirectly (destroying the habitats of Arctic and Antarctic animals). As extinction increases, then, so does global warming, which in turn causes more extinction - and so on, into a downward spiral of destruction.     Why, exactly, should we care? Let's start with the most celebrated case: the rainforests. Their loss will worsen global warming - raising temperatures, melting icecaps, and flooding coastal cities. And, as the forest habitat shrinks, so begins the inevitable contact between organisms that have not evolved together, a scenario played out many times, and one that is never good. Dreadful diseases have successfully jumped species boundaries, with humans as prime recipients. We have gotten aids from apes, sars from civets, and Ebola from fruit bats. Additional worldwide plagues from unknown microbes are a very real possibility.     But it isn't just the destruction of the rainforests that should trouble us. Healthy ecosystems all over the world provide hidden services like waste disposal, nutrient cycling, soil formation, water purification, and oxygen production. Such services are best rendered by ecosystems that are diverse. Yet, through both intention and accident, humans have introduced exotic species that turn biodiversity into monoculture. Fast-growing zebra mussels, for example, have outcompeted more than 15 species of native mussels in North America's Great Lakes and have damaged harbors and water-treatment plants. Native prairies are becoming dominated by single species (often genetically homogenous) of corn or wheat. Thanks to these developments, soils will erode and become unproductive - which, along with temperature change, will diminish agricultural yields. Meanwhile,with increased pollution and runoff, as well as reduced forest cover, ecosystems will no longer be able to purify water; and a shortage of clean water spells disaster.     In many ways, oceans are the most vulnerable areas of all. As overfishing eliminates major predators, while polluted and warming waters kill off phytoplankton, the intricate aquatic food web could collapse from both sides. Fish, on which so many humans depend, will be a fond memory. As phytoplankton vanish, so does the ability of the oceans to absorb carbon dioxide and produce oxygen. (Half of the oxygen we breathe is made by phytoplankton, with the rest coming from land plants.) Species extinction is also imperiling coral reefs - a major problem since these reefs have far more than recreational value: They provide tremendous amounts of food for human populations and buffer coastlines against erosion.     In fact, the global value of "hidden" services provided by ecosystems - those services, like waste disposal, that aren't bought and sold in the marketplace - has been estimated to be as much as $50 trillion per year, roughly equal to the gross domestic product of all countries combined. And that doesn't include tangible goods like fish and timber. Life as we know it would be impossible if ecosystems collapsed. Yet that is where we're heading if species extinction continues at its current pace.     Extinction also has a huge impact on medicine. Who really cares if, say, a worm in the remote swamps of French Guiana goes extinct? Well, those who suffer from cardiovascular disease. The recent discovery of a rare South American leech has led to the isolation of a powerful enzyme that, unlike other anticoagulants, not only prevents blood from clotting but also dissolves existing clots. And it's not just this one species of worm: Its wriggly relatives have evolved other biomedically valuable proteins, including antistatin (a potential anticancer agent), decorsin and ornatin (platelet aggregation inhibitors), and hirudin (another anticoagulant).     Plants, too, are pharmaceutical gold mines. The bark of trees, for example, has given us quinine (the first cure for malaria), taxol (a drug highly effective against ovarian and breast cancer), and aspirin. More than a quarter of the medicines on our pharmacy shelves were originally derived from plants. The sap of the Madagascar periwinkle contains more than 70 useful alkaloids, including vincristine, a powerful anticancer drug that saved the life of one of our friends.     Of the roughly 250,000 plant species on Earth, fewer than 5 percent have been screened for pharmaceutical properties. Who knows what life-saving drugs remain to be discovered? Given current extinction rates, it's estimated that we're losing one valuable drug every two years.     Our arguments so far have tacitly assumed that species are worth saving only in proportion to their economic value and their effects on our quality of life, an attitude that is strongly ingrained, especially in Americans. That is why conservationists always base their case on an economic calculus. But we biologists know in our hearts that there are deeper and equally compelling reasons to worry about the loss of biodiversity: namely, simple morality and intellectual values that transcend pecuniary interests. What, for example, gives us the right to destroy other creatures? And what could be more thrilling than looking around us, seeing that we are surrounded by our evolutionary cousins, and realizing that we all got here by the same simple process of natural selection? To biologists, and potentially everyone else, apprehending the genetic kinship and common origin of all species is a spiritual experience - not necessarily religious, but spiritual nonetheless, for it stirs the soul.     But, whether or not one is moved by such concerns, it is certain that our future is bleak if we do nothing to stem this sixth extinction. We are creating a world in which exotic diseases flourish but natural medicinal cures are lost; a world in which carbon waste accumulates while food sources dwindle; a world of sweltering heat, failing crops, and impure water. In the end, we must accept the possibility that we ourselves are not immune to extinction. Or, if we survive, perhaps only a few of us will remain, scratching out a grubby existence on a devastated planet. Global warming will seem like a secondary problem when humanity finally faces the consequences of what we have done to nature: not just another Great Dying, but perhaps the greatest dying of them all.

### 2AC – Elections DA (Obama Good)

**SMRs key to spurring US economic competitiveness**

**Fleischmann ’11** (Chuck, Representative from the 3rd District in Tennessee, “Small Modular Reactors Could Help With U.S. Energy Needs”, American Physical Society, Vol. 6, No. 2, http://www.aps.org/publications/capitolhillquarterly/201110/backpage.cfm, October 2011)

The timely implementation of small reactors could position the United States on the **cutting edge** of nuclear technology. As the world moves forward in developing new forms of nuclear power, the United States should set a high standard in safety and regulatory process. Other nations have not been as rigorous in their nuclear oversight with far reaching implications. As we consider the disastrous events at the Fukushima Daiichi nuclear facility, it is imperative that power companies and regulatory agencies around the world adequately ensure reactor and plant safety to protect the public. Despite terrible tragedies like the natural disaster in Japan, nuclear power is still one of the safest and cleanest energy resources available. The plan to administer these small reactors would create technologically advanced U.S. jobs and **improve our global competitiveness**. Our country needs quality, high paying jobs. Increasing our competitive edge in rapidly advancing industries will put the United States in a strategic position on the forefront of **expanding global technologies** in the nuclear arena.

Fiscal cliff depends on congress

#### No fiscal cliff compromise - Senate efforts will die in the House

**Lemire 10/3/12** (Jonathan, NY Daily News, "Bipartisan Senate ‘Gang of Eight’ works to avoid year-end fiscal crisis as Bush tax cuts end," http://www.nydailynews.com/news/politics/senate-gang-8-works-stem-tax-crisis-article-1.1173739#ixzz28TfWj3OS)

The Gang of Six has grown to eight — and their mission is to save the American economy.¶ Eight senators — four Democrats, four Republicans — will meet this month to prevent the federal government from plunging over a looming fiscal cliff.¶ While their summits will be eclipsed by the final month of the presidential campaign, the eight men are tasked with finding a solution to problems posed by the expiration of Bush-era tax cuts and automatic massive cuts to federal spending.¶ Their meetings are shrouded in secrecy, and aides have provided no details.¶ “This group continues to meet and work toward a bipartisan solution,” is all a spokesman for Sen. Mark Warner (D-Va.) would tell Politico on Wednesday.¶ Warner, along with Sen. Dick Durbin of Illinois and Kent Conrad of North Dakota, was one of three Democrats in the original Gang of Six, which was formed last summer to solve the nation’s debt ceiling crisis.¶ The group — joined by Republicans Saxby Chambliss of Georgia, Mike Crapo of Idaho and Tom Coburn of Oklahoma — failed to reach a deal.¶ But they have reconvened to tackle a new crisis and have been joined by Sen. Lamar Alexander (R-Tenn.) and Sen. Michael Bennet (D-Colo.), according to Politico.¶ The group has little power but widespread appeal, as bipartisan meetings are considered a refreshing alternative for gridlocked Washington.¶ But even if the Gang of Eight senators reach a deal, it may very well fall apart in the House of Representatives.¶ The latest polling suggests that the Republicans will retain control of the House and their leadership there has already voted to extend the Bush tax cuts and stop the cuts to defense spending.

#### Romney will win --- Electoral College models prove.

**Hoover**, **10/5**/2012 (Tim – staff writer for the Denver Post, CU professors double-down on prediction of Romney win due to economic factors, The Denver Post, p. <http://blogs.denverpost.com/thespot/2012/10/05/cu-professors-doubledown-prediction-romney-win-due-economic-factors/83220/>)

Remember the University of Colorado professors who predicted Mitt Romney would win the election because of economic factors – despite national pollsters predicting President Barack Obama well ahead? Well, political science professors Kenneth Bickers of CU-Boulder and Michael Berry of CU Denver have updated their model and say the new data still shows a Romney win. According to the updated analysis, Romney would get 330 Electoral College votes to Obama’s 208 votes, even less than the 218 the pair predicted during the summer and still well short of the 270 needed to win. Again, it’s a huge disconnect from national punditry which still shows an easy Obama victory (though experts say new polling will have to gauge the effect of Romney’s success during Wednesday’s debate). “We continue to show that the economic conditions favor Romney even though many polls show the president in the lead,” Bickers said. “Other published models point to the same result, but they looked at the national popular vote, while we stress state-level economic data.” The pair’s analysis relies on state and national unemployment figures and changes in real per capita income, among other factors. Their updated analysis includes unemployment rates from August instead of May, and has changes in per capita income from the end of June rather than March. The duo predicts Romney winning all but three of 13 battleground states.

#### Their rollback card is about wind and solar – not nuclear power

**Double bind –**

**Link is nonunique – extend the energy.gov evidence – Obama has already publicly endorsed SMRs, supporting DOE loan guarantees, so he should already be losing**

**If they win he’s not losing, that just proves nuclear power isn’t a key issue for the election OR that obama’s not tied to agency action which means the DoD shields perception**

**Heslop ‘11** (Janelle, Analyst at GreenOrder and LRN Advsior Group, “3 Reasons Why the Military is Leading the Clean-Energy Change” 10/11/11)

3. **Even while national progress on energy policy stagnates in the midst of partisan debate, the military has the ability to make large, impactful and immediate investments in clean energy**. **This is because the military's commitment to renewable energy adoption, though fiscally subject to congressional approval, is not dictated by the same political discourse that is hindering the creation of a national energy bill.** As a result, **the military does not need to wait for the political debate to complete its course,** **and with its large purchasing power can confidently begin** [**investing**](http://www.greenbiz.com/blog/2011/10/12/3-reasons-why-military-is-leading-clean-energy-charge?page=0%2C1) **in a clean energy future now**. In fact, the military's goals on energy are far more aggressive than what seems politically feasible in the civilian world in the near term and will likely stay that way for some time.

**Overwhelming public support for nuclear energy - multiple polls**

**WNA 12** (WNA is the World Nuclear Association. “US Nuclear Power Policy” August, 2012. http://www.world-nuclear.org/info/inf41\_US\_nuclear\_power\_policy.html)

**Public opinion regarding nuclear power has generally been fairly positive, and has grown more so as people have had to think about security of energy supplies. Different polls show continuing increase in public opinion favorable to nuclear power in the USA. More than three times as many strongly support nuclear energy than strongly oppose it**. Two-thirds of self-described environmentalists favor it. A May 2008 survey (N=2925) by Zogby International showed 67% of Americans favored building new nuclear power plants, with 46% registering strong support; 23% were opposed[10](http://www.world-nuclear.org/info/inf41_US_nuclear_power_policy.html#References). Asked which kind of power plant they would prefer if it were sited in their community, 43% said nuclear, 26% gas, 8% coal. Men (60%) were more than twice as likely as women (28%) to be supportive of a nuclear power plant. A March 2010 Bisconti-GfK Roper survey showed that strong public support for nuclear energy was being sustained, with 74% in favor of it[11](http://www.world-nuclear.org/info/inf41_US_nuclear_power_policy.html#References). In particular, **87% think nuclear will be important in meeting electricity needs in the years ahead, 87% support license renewal for nuclear plants, 84% believe utilities should prepare to build more nuclear plants, 72% supported an active federal role in encouraging investment in "energy technology that reduces greenhouse gases", 82% agree that US nuclear plants are safe and secure, 77% would support adding a new reactor at the nearest nuclear plant, and 70% say that USA should definitely build more plants in the future.** Only 10% of people said they strongly opposed the use of nuclear energy. In relation to recycling used nuclear fuel, 79% supported this (contra past US policy), and the figure rose to 85% if "a panel of independent experts" recommended it. Although 59% were confident that used reactor fuel could be stored safely at nuclear power plant sites, 81% expressed a strong desire for the federal government to move used nuclear fuel to centralized, secure storage facilities away from the plant sites until a permanent disposal facility is ready. Half of those surveyed considered themselves to be environmentalists. A February 2011 Bisconti-GfK Roper survey showed similar figures, and that 89% of Americans agree that all low-carbon energy sources – including nuclear, hydro and renewable energy – should be taken advantage of to generate electricity while limiting greenhouse gas emissions. Just 10% disagreed. Also some **84% of respondents said that they associate nuclear energy "a lot" or "a little" with reliable electricity;** 79% associate nuclear energy with affordable electricity; 79% associate nuclear energy with economic growth and job creation; and 77% associate nuclear energy and clean air. A more general March 2010 Gallup poll (N=1014) on energy showed 62% in favor of using nuclear power, including 28% strongly so, and 33% against, the most favorable figures since Gallup began polling the question in 1994. However, only 51% of Democrat voters were in favor[12](http://www.world-nuclear.org/info/inf41_US_nuclear_power_policy.html#References). An early March 2011 Gallup poll just before the Fukushima accident showed 57% in favor and 38% against, and in March 2012 (N=1024) still 57% in favor with 40% against (men: 72%-27%, women 42%-51%). **Regarding plant safety, the polls showed consistent 56-58% positive views over 2009-12, but men-women split similar. A survey conducted in September 2011** by Bisconti Research Inc. with GfK Roper **showed that although support for nuclear power decreased following the Fukushima accident** and compared with a year earlier (a survey carried out in March 2010 by Bisconti Research found 74% of Americans favored nuclear power), **62%** of the 1000 **adults** surveyed in the latest poll **were supportive of utilizing nuclear power** while 35% expressed opposition. The survey found that **82% of Americans believed that lessons had been learned from** Fukushima and 67% of respondents considered US nuclear power plants safe (the same level as reported one month before the nuclear accident in Japan occurred). Also **85% of said that an extension of commercial operation should be granted to those plants that comply with federal safety standards**, and 59% believed more nuclear power plants should definitely be built in the future, while 75% contend that “Electric utilities should prepare now so that new nuclear power plants could be built if needed in the next decade.” Finally, further expansion of the site of the nearest already operating nuclear power plant is supported by 67% and opposed by 28%. By February 2012 support had increased slightly to 64% supported using nuclear power, while 33% opposed it. Some 81% of respondents believed that nuclear energy will be important in meeting the USA's future electricity needs (compared with 80% in September), and 82% thought the USA should "take advantage of all low-carbon energy sources, including nuclear, hydro and renewable energy." Significantly, 74% believed that nuclear power plants operating in the USA are safe, up from 67% in both 2011 surveys. However, a Harris survey in February 2012 (N=2056) showed that only 40% of US adults believed that the benefits of nuclear outweigh its risks, while 41% thought the reverse. A similar poll conducted in 2011 before the Fukushima accident occurred, indicated that 42% thought that the benefits outweighed the risks, while 37% believed the opposite. In a 2009 poll, 44% thought the benefits outweighed the benefits, while 34% thought they did not. The southern states had the highest percentage of people believing the benefits outweigh the risks (at 43%), compared with 33% in the East and 41% in the Midwest and West. Some 42% of Americans thought that the benefits of using coal outweighed the risks (up from 38% positive in 2011), while 40% said the risks outweighed the benefits.

**Plan is as a foreign policy win – seen as a move towards energy independence**

**More than half the country support nuclear expansion – its key to job growth**

**Whitman 8-13** [Christine Todd Whitman CASEnergy Co-Chair, Former EPA Administrator and New Jersey Governor, “Nuclear Power Garners Bipartisan Support”, August 13th, 2012, <http://energy.nationaljournal.com/2012/08/finding-the-sweet-spot-biparti.php>, Chetan]

**The energy policy that I’ve seen garner consistent support from the left and the right** over the years is also one with which I’m deeply familiar. This policy **involves** building a diverse portfolio of low-carbon energy sources, featuring a **renewed investment in nuclear energy. And it’s not just policymakers** from both sides of the aisle who support nuclear energy – **it’s everyday energy consumers** as well. According to a Gallup poll conducted in March of this year, **nearly 60 percent of Americans support the use of nuclear energy** to meet our nation’s electricity needs, **and a majority support expanding America’s use of nuclear power**. **Next-generation** nuclear energy **projects are underway in Georgia, South Carolina and Tennessee, thanks** in part **to steady popular support**, as well as support from President Obama, bipartisan congressional leaders and other policymakers at the federal and state levels. **An additional 10 combined construction and operating licenses** for 16 plants **are under review** by the Nuclear Regulatory Commission. This support is founded in the fact that nuclear energy, safely managed, provides an efficient, reliable source of energy. In fact, nuclear power is the only baseload source of carbon-free electricity. It provides nearly two-thirds of the nation’s low-carbon electricity, and will continue to be an important source of energy well into the future given the advent of innovative large and small reactor designs. The use of nuclear energy prevents more than 613 million metric tons of carbon dioxide every year – as much CO2 as is emitted by every passenger car in America. Bipartisan **support for nuclear energy** also st**ems from the boost that it provides to local job markets and to local and state economies**. As nuclear energy expands and as more than half of the industry workforce approaches retirement, **the industry offers growing opportunities for well-paying careers**. The industry already supports more than 100,000 jobs, and the combination of retirements and the construction of **new facilities could create as** **many as 25,000 new jobs in the near term**. What’s more, the **construction of a nuclear facility spurs the creation of other local jobs in industries ranging from manufacturing to hospitality. The industry generates** between $40 and $50 billion in revenue and electricity sales, or **some $470 million in total economic output** and $40 million in labor wages at each U.S. facility every year. **That’s a powerful economic engine and a positive impact that leaders are embracing.** As America refocuses on cleaner energy policies that help boost our economy, nuclear power is becoming a clear and critical part of a secure, sustainable energy portfolio. **We need electricity and we want clean air; with nuclear energy we can have both.** It’s a source of power that leaders on both sides of the aisle can support.

**Disad’s not intrinsic – logical policymaker can do the plan and not allow relations with Russia to collapse**

**SMRs address the only public concern about nuke power**

**Worthington 11** [David Worthington – Contributing Editor to SmartPlanet, “Small nuclear reactors: America’s energy future?” December 18th, 2011, <http://www.smartplanet.com/blog/intelligent-energy/small-nuclear-reactors-americas-energy-future/11412>, Chetan]

**Small Modular Reactor** (SMR) **concepts could help make future nuclear power plants in the United States safer** **and easier** to construct **while helping to recycle stockpiles of existing uranium fuel waste**. **The general idea** behind SMRs **is to cluster together many small reactors** to match the output of obsolete coal or nuclear facilities. Steam output from many modules would power a common generator to produce electricity. **Each module would be equipped with its own containment assembly** that’s housed in a pre-fabricated unit. Think of it as a nuclear assembly line. A module would be small enough to be shipped to a new reactor build by rail or truck rather than assembly components inside of a containment dome onsite. All-in-one fabrication would streamline nuclear power plant construction by several years, said Steve Rus, executive director for nuclear technologies at Black & Veatch. SMRs would be housed in a steel and concrete embedment that resides below grade. B&V has had a sizeable nuclear business since World War II. Small modular reactor designs are also supported by the Obama administration, which sees nuclear power as a way to reduce carbon emissions. However, **the public is understandably warier of nuclear power post Fukushima, and would need some reassurances of its safety. The SMR addresses the greatest perceived danger - nuclear meltdowns** – a threat that has loomed since the dawn of the nuclear era. **It doesn’t require active cooling systems to prevent a meltdown, and would theoretically shut down safely without any outside intervention.** Traditional active cooling systems at large scale reactors utilize water pumps and back-up power systems to control residual or decay heat after a reaction is stopped. An external power source and/or coolant are eventually necessary within a matter of days. Recent third generation+ reactor designs incorporate passive cooling technologies with traditional active cooling techniques, but that approach only buys more time until there’s meltdown conditions. Several **reactors at** Tokyo Electric Power’s **Fukushima plants melted down when** diesel back-up systems failed and mainland power lines were destroyed in the wake of twin natural disasters. **It was reliant on active cooling**, and its engineers hadn’t envisioned a tsunami striking far inland. **A module reactor’s passive cooling system could** theoretically **survive that scenario,** and non-water cooling systems could further increase margins of safety. “The concept is **these could go on almost indefinite periods** in passive manner **with no intervention** relative to the cooling of core and decay/residual heat. Potentially, it could never require any additional intervention,” Rus said. The initial SMRs will continue to utilize water for cooling and uranium fuel, but sodium and lead bismuth alloys could foreseeably replace water in fourth generation models – provided they pass Nuclear Regulatory Commission (NRC) review, Russ said. The NRC’s regulators are very familiar with light water reactors, but alternative fuel sources would require different cooling methods, Rus said. Thorium is arguably safer than uranium both in the risk of accidents and for nuclear nonproliferation. “The coolant form is different than water, therefore there’s natural benefits in the way it cools reactor,” Rus explained. A sodium coolant would be liquid under normal operating conditions, but solidify and encase the reactor upon a cold shutdown. Molten salt is also a potential future fuel source. Aside from the NRC’s institutional history, uranium’s other advantage is that there’s also an abundance of fuel in the form of nuclear waste that is being sequestered at nuclear facilities around the United States. Spent fuel rods could become a source of energy for newer generation reactors, Rus suggested. “More than 90 percent of the energy is still in that fuel. One thing that has to come to life is recycling. **After reprocessing, waste is significantly less,** and then there ultimately needs to be a way to address that waste.”

**Plan not key --- the state of the economy will outweigh.**

**N**ew **Y**ork **T**imes, 3/13/**2012** (Muddled Economic Picture Muddles the Political One, Too, p. <http://www.nytimes.com/2012/03/14/us/politics/economy-plays-biggest-role-in-obama-re-election-chances.html?_r=1>)

The final major economic turning point of President Obama’s first term seems to have arrived. **The question is which way the economy will turn**. Job growth has picked up nicely in the last few months, raising the prospect that the American economy is finally in the early stages of a recovery that will gather strength over time. But with gas prices rising, the government cutting workers and consumers still deep in debt, some forecasters predict that economic growth — and with it, job growth — will slow in coming months. Politically, **the difference between the two situations is vast. In one**, Mr. **Obama will be able to campaign on a claim**, as he has recently begun to do, **that the country is back on track. In another, he will be left to explain that recoveries** from financial crises **take years**, and to argue that Republicans want to return to the Bush-era policies that created the crisis — as he tried to argue, unsuccessfully, in the 2010 midterm election. His approval rating has slipped again in some polls recently, with higher gas prices possibly playing a role. As a result, **the economic numbers** over the next couple of months, including an unemployment report on April 6, **will have bigger political implications** than the typical batch of data. The Federal Reserve acknowledged the uncertainty in its scheduled statement on Tuesday, suggesting the economy had improved somewhat but still predicting only “moderate economic growth.” Economists say the economy’s near-term direction depends relatively little on Mr. Obama’s economic policies. The standoff over Iran’s nuclear program, the European debt crisis and other events will most likely affect the economy more. But **many American voters are still likely to make their decision based on the economy. Historically, nothing — not campaign advertisements, social issues or even wars — has influenced voters more heavily than the direction of the economy in an election year. “If you could know one thing and you had to predict which party was going to win the** next presidential **election**,” Lynn **Vavreck, a political scientist at** the **U**niversity of **C**alifornia, **L**os **A**ngeles, **said, “you couldn’t do better than knowing the change in economic growth**.”

**Energy is not a key election issues --- other issues outweigh.**

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

Energy issues don’t spark much excitement among voters, **ranking below health care, education and the federal budget deficit — not to mention jobs and the economy**. And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads. The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry. Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.” Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag. In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway. When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, **fewer than 1 percent mention energy**.

### 2AC – Oil Tradeoff DA

#### Case is an impact turn to the da- green economy is key to sustainable growth and solves warming- relying on Oil only makes the problem worse

#### Incentives now which means OPEC should’ve freaked out – first card

#### 2. Peak oil now

**Jamail 11**

(Dahr, Independent Journalist, Citing Tom Whipple, Energy Scholar at the CIA 2011, "The scourge of 'peak oil'," http://english.aljazeera.net/indepth/features/2011/07/201172081613634207.html)

Tom Whipple, an energy scholar, was a CIA analyst for 30 years - and believes we are likely at, or very near, a point in history when the maximum production capacity for oil is reached, a phenomenon often referred to as "peak oil". "Peak oil is the time when the world's production reaches the highest point, then starts back down again," Whipple told Al Jazeera. "Oil is a finite resource, and [it] someday will go down, and that is what the peak oil discussion is all about." There are signs that peak oil may have already arrived. The International Energy Agency (IEA) recently increased its forecast for average global oil consumption in 2011 to 89.5 million barrels per day (bpd), an increase of 1.2 million bpd over last year. For 2012, the IEA is expecting another increase of 1.5 million bpd for a total global oil consumption of 91million bpd, leaving analysts such as Whipple to question how production will be able to keep up with increasing consumption. Whipple's analysis matches IEA data which shows world oil production levels have been relatively flat for six years. "This is getting very close to the figure that some observers believe is the highest the world will ever produce," Whipple wrote of the IEA estimate in the July 14 issue of Peak Oil Review. He told Al Jazeera that peak oil could be reached at some point in the next month, or at the latest, within "a few years". Low-hanging fruit Marion King Hubbert, a geoscientist who worked at the Shell oil research lab developed the "Hubbert curve", a logistical model that accurately predicted that oil production in the United States would peak between 1965 and 1970. His model has described fairly accurately the peak and decline of production from oil fields, wells, regions, and countries. According to Hubbert's model, oil production rates will follow a roughly symmetrical distribution curve based on exploitability and market pressures. Optimists estimate that peak oil production and global availability will decline beginning in 2020 or later, and don't see a crisis happening that would affect major changes in lifestyles of oil-consuming nations. A study published in the Energy Policy journal, however, predicts that demand will surpass supply by 2015 unless sustained economic recession constrains demand. The IEA says that production of conventional crude oil already peaked in 2006, and economic indicators show that, through the first two quarters of 2008, the global economic recession was made worse by a series of record oil prices. Both production and discovery of new oil fields appear now to be relatively stagnant compared with recent decades, and world oil generating levels reached a plateau several years ago, reports the IEA. Richard Heinberg, author of ten books related to peak oil and its impact on our economic, food, and transportation systems, believes peak oil is a function of the dominant principles of resource extraction. "Many people believe it's about running out of oil, and it's not," he told Al Jazeera. "It's about finishing off the low-hanging fruit." Oil is an energy dense, portable resource, and the energy that has been expended finding and extracting it is minute when compared to the energy it produces. But Heinberg argues that we have likely already reached the maximum production limits for oil. "Prices are almost at all-time highs, global output of oil has been stagnant for six years, and look at the cost of the BP disaster in the Gulf of Mexico," he said. "The cost of producing oil has increased dramatically in the last decade, both financially as well as the cost to the environment." Meanwhile, world demand for crude oil grew at nearly two per cent each year between 1994 and 2006. In 2007, global demand peaked at 85.6 million bpd, but decreased in 2008 and 2009 by a total of 1.8 per cent, reportedly due to rising fuel costs. Despite the lull, world demand for oil is projected by the IEA to increase more than 21 per cent over 2007 levels by 2030, from 86 million bpd to 104 million bpd, due largely to increases in demand from the transportation sector. According to the US Energy Information Administration, current world oil consumption is approximately 88 million bpd, enough to fill roughly 5,500 Olympic-sized swimming pools each day. In 2007 the IEA issued a warning in their World Energy Outlook publication: "Although new oil-production capacity additions from greenfield projects are expected to increase over the next five years, it is very uncertain whether they will be sufficient to compensate for the decline in output at existing fields and keep pace with the projected increase in demand." The report added, "A supply-side crunch in the period to 2015, involving an abrupt escalation in oil prices, cannot be ruled out." As consumption continues to increase in such major users as China, India, and the US, existing oil fields are being depleted and new discoveries are not keeping apace in order to offset growing demand. "One thing to remember is that there is global depletion," Whipple said. "If you don't come up with new sources every year, you can't keep up. Wells are going dry daily. World depletion is three to four million barrels less oil available each year in existing fields." Whipple is blunt about what life will look like in a post-peak oil world. "You're going to see major changes in industrial civilisation," he said, adding that he expects oil to once again approach $150 per barrel in the next 18 months. "In the US, where we aren't used to paying $10 for a gallon of gas like they do in Germany, that [$150 per barrel of oil] will really slow things down." He believes discretionary driving will basically stop, and added: "Anything with a parking lot out front is going to be in trouble."

#### 3. No trade off – nuclear power can’t power cars or other transportation just offsets the amount of emissions

#### Incentives now

Kramer 12 [David Kramer, Physics Today, Sept 2012, Romney, Obama surrogates spell out candidates’ energy policies, www.physicstoday.org/resource/1/phtoad/v65/i9/p20\_s1]

Both candidates favor growth in nuclear energy, and both support loan guarantees to back the initial deployment of advanced reactors. Stuntz said Romney would take steps to lower the cost of building new plants, “whether that means modular reactors that can be approved and rolled out in more cookie-cutter fashion . . . or whether that means smaller reactors.” The Obama administration’s support for nuclear power is evident from the $7 billion loan guarantee from DOE to back construction of two new reactors at an existing nuclear power plant in Georgia, Reicher noted. “**There’s serious money going into small modular reactors** and serious policy work going on in how to reform the licensing process” at the Nuclear Regulatory Commission to expedite approval.

#### Federal SMR loans coming—announced in September

Energy Collective 12 [Energy Collective, 7/26/12, Race for DOE SMR money heats up, theenergycollective.com/dan-yurman/97081/race-doe-smr-money-heats]

The Department of Energy is reviewing proposals from B&W and several other SMR firms to be granted up to $452 million over five years to support SMR engineering and licensing work. The agency will make up to two awards by the end of September this year.

#### Other alt energy subsidies and programs in the squo

Russia’s economy is resilient – strong foreign investment and reserves

**Garrels 8** Roving foreign correspondent for NPR’s foreign desk. (Anne Garrels, “Russia Economy Strong Despite Commodity Fallout”, NPR, September 20, 2008, page 1, http://www.npr.org/templates/story/story.php?storyId=94647099, CH)

For the past six years, Russia's economy has boomed in large part because of soaring prices for oil and metals. Russia is strong in these areas — too strong, though, for a balanced economy. Russian shares have bled almost 50 percent of their value since May, but many analysts say Russia still remains a resilient economy. And after the Georgia invasion and weeks of harsh, anti-western rhetoric, both Russian President Dmitri Medvedev and Prime Minister Vladimir Putin have tried to reassure foreign investors. When those commodities prices dropped, Russia's stock market was hit hard. "The question is if they fall significantly further," says James Fenkner with Red Star Assets in Moscow. Fenkner is one of the more cautious voices in Moscow, and other analysts like Roland Nash of Renaissance Capital look at other indicators, like direct foreign investment. "The level of foreign investment is twice the per capita of Brazil, four times that of China, and six times that of India this year," Nash says. "The market arguments for Russia are still very good and there is still a lot of money coming in." Too Dependent On Commodities The Russia government recognizes it is too dependent on commodities, and while their prices were high, it amassed huge reserves as a cushion. The country now has a balanced budget and financial analysts predict its economy will continue to grow at about six percent.