### Licensing 2AC

#### Vogtle licensing provides a stable and predictable investment climate for the nuclear power industry.

**Gray, ‘12**

[Chuck, Executive Director -- National Association of Regulatory Utility Commissioners, “A Strong Step, but Hurdles Remain,” http://energy.nationaljournal.com/2012/02/is-america-poised-for-nuclear.php]

The Nuclear Regulatory Commission’s approval of the new units at Plant Vogtle is an important development for both the nuclear industry and our country. With the issuances of these licenses, the industry knows what to expect moving forward, sending a strong signal to the critical stakeholders, including both the investment community and, significantly, the State regulators that NARUC represents. A predictable investment climate can lead to stable rates. At the end of the day, we hope the big winners are the consumers who pay for the bulk of building these plants.

### Nanotech

#### Demonstration projects are key to motivate scientist recruitment – salaries can be adjusted regardless of funding

**National Acadamies Press 12** [2012, Improving the Recruitment, Retention, and Utilization of Federal Scientists and Engineers: A Report to the Carnegie Commision on Science, Technology and Government, <http://www.nap.edu/openbook.php?record_id=2102&page=37>]

There have been no significant changes in NIST's workforce quality indicators—undergraduate grade-point averages, quality of graduate schools, and performance appraisal ratings—which traditionally have been high. Turnover rates, already very low, have not changed,¶ although surveys of leavers indicate that salary has become a less important reason for leaving. Department of Agriculture Demonstration The committee also heard presentations by officials from the U.S. Department of Agriculture (USDA) and its Agricultural Research Service (ARS) about a personnel demonstration project begun in mid-1990 in 140 experimental and 70 comparison sites of the Forest Service and the ARS. The project is largely a testing of a comprehensive simplification and decentralization of the hiring system, but it does include recruitment bonuses and relocation expenses and use of an extended probationary period for scientists in research positions.14 The committee heard that the recruitment incentives have been rarely used, although they were important in attracting a microbiologist and a plant physiologist. It is too early to evaluate the results of the longer probationary period on the retention and productivity of research scientists. Lessons While they are only quasi-experiments, and they do not measure the effects of the interventions on organizational effectiveness, other effects of the various interventions have been measured, the Navy and NIST demonstration projects are consistent with the proposition that a more flexible pay and position structure improves the ability of federal agencies to recruit more qualified scientists and engineers and to reward and motivate good performers and thus retain them. They also show that the direct cost of such efforts is modest, in part because the agencies can (and do, because of budget constraints) tailor the compensation package to each case rather than increase salaries across the board. In addition, the differences among the demonstrations designed by each agency to 14 The extended probationary period does not apply to foresters and other scientists not in research positions.¶ OCR for page 56¶ Improving the Recruitment, Retention, and Utilization of Federal Scientists and Engineers: A Report to the Carnegie Commision on Science, Technology and Government meet its needs show that the various mechanisms can and should be adapted to the particular conditions facing each agency. Thus the agencies faced with implementing FEPCA should consider it an opportunity to design their own recruitment and retention programs. Unfortunately, FEPCA does not include all the devices and flexibilities being used by the demonstration projects. Additional steps needed beyond FEPCA to improve the federal government's capacity to recruit well-qualified scientific and technological personnel are recommended in the last chapter. First, the next chapter discusses the flexibilities offered under FEPCA to agencies faced with attracting and keeping well-qualified scientists and engineers and identifies potential obstacles to effective implementation of FEPCA.

### Prolif

#### The credibility thesis is completely false

**Ford 9** [“Nuclear Disarmament, ¶ Nonproliferation, ¶ and the “Credibility ¶ Thesis”, Christopher Ford, September 2009, senior fellow and director of the Center for Technology and ¶ Global Security at Hudson Institute¶ U.S. special representative for ¶ nuclear nonproliferation¶ principal deputy assistant ¶ secretary of state for verification, compliance]

Strikingly, these various proliferation challenges—and the sad and all-too-often ¶ willful limpness of the international community’s response—all took place during a ¶ period of extraordinary nuclear weapons reductions by the United States and Russia. ¶ These reductions have already been described, but the point bears re-emphasizing: These ¶ problems with proliferation, and an international community unwilling to address them ¶ effectively, occurred when the nuclear superpowers were making massive and ¶ unprecedented reductions in their nuclear weapons holdings. What does this tell us about ¶ the purported link between disarmament credibility and the international community’s ¶ willingness to bear burdens in support of nonproliferation? ¶ To put it gently, the historical record offers little support for the credibility thesis. ¶ (If anything, it could be said to point in the opposite direction. While one should certainly ¶ always be careful about asserting a causal connection between succeeding events, it is ¶ certainly possible to imagine skeptics advancing a counter-argument—with at least as ¶ much facial plausibility—that this history suggests that the interests of nonproliferation ¶ might be better served by the maintenance of robust superpower arsenals!) Under the ¶ circumstances, what is perhaps most remarkable about the credibility thesis is that anyone ¶ dares to advance it at all. ¶ A

### Coercion

**Taxes aren’t theft and they are ethical– social contract proves big government is good.**

Kangas 99 Graduate student in Political Science, 99 (Steve, “Myth: Taxes are theft,” 3/19, <http://www.huppi.com/kangaroo/L-taxestheft.htm>, date accessed: 7/11/08)

Many conservatives and libertarians make the following populist argument: "If you don't pay your taxes, men with guns will come to your house, arrest you, and seize your property." The implication here is that you are being extorted to pay taxes, and this theft amounts to a violation of your rights. Although the events described are technically correct -- you should expect such a response from any crime you commit -- the implication that the government is aggressing against you is false, and not a little demagogic. Taxes are part of a social contract, an agreement between voters and government to exchange money for the government's goods and services. Even libertarians agree that breach of contract legitimates a police response. So the real question is not whether a crime should be met with "men with guns," but whether or not the social contract is valid, especially to those who don't agree with it or devote their allegiance to it. Liberals have two lines of argument against those who reject the idea of the social contract. The first is that if they reject it, they should not consume the government's goods and services. How they can avoid this when the very dollar bills that the economy runs on are printed by the government is a good question. Try to imagine participating in the economy without using public roads, publicly funded communication infrastructure, publicly educated employees, publicly funded electricity, water, gas, and other utilities, publicly funded information, technology, research and development -- it's absolutely impossible. The only way to avoid public goods and services is to move out of the country entirely, or at least become such a hermit, living off the fruits of your own labor, that you reduce your consumption of public goods and services to as little as possible. Although these alternatives may seem unpalatable, they are the only consistent ones in a person who truly wishes to reject the social contract. Any consumption of public goods, no matter how begrudgingly, is implicit agreement of the social contract, just as any consumption of food in a restaurant is implicit agreement to pay the bill. Many conservatives and libertarians concede the logic of this argument, but point out that taxes do not go exclusively to public goods and services. They also go for welfare payments to the poor who are allegedly doing nothing and getting a free ride from the system. That, they claim, is theft. But this argument fails too. Welfare is a form of social insurance. In the private sector we freely accept the validity of life and property insurance. Obviously, the same validity goes for social insurance like unemployment and welfare. The tax money that goes to social insurance buys each one of us a private good: namely, the comfort of being protected in times of adversity. And it buys us a public good as well (although tax critics are loathe to admit this). If workers were allowed to unnecessarily starve or die in otherwise temporary setbacks, then our economy would be frequently disrupted. Social insurance allows workers to tide over the rough times, and this establishes a smooth-running economy that benefits us all.

#### Utilitarianism is the only successful method for weighing debate impacts- all other theoretical frameworks fail

Robert E. Goodin, Professor of Philosophy at the University of Australia, “Utilitarianism as a Public Philosophy”, pg 26 1995

The greatest advantage of utilitarianism as a guide to public conduct is that it avoids gratuitous sacrifices, it ensures as best we are able to ensure in the uncertain world of public policy-making that policies are sensitive to people’s interests or desires or preferences. The great failing of more deontological theories, applied to those realms, is that they fixate upon duties done for the sake of duty rather than for the sake of any good that is done by doing one’s duty. Perhaps it is permissible (perhaps it is even proper) for private individuals in the course of their personal affairs to fetishize duties done for their own sake. It would be a mistake for public officials to do likewise, not least because it is impossible. The fixation on motives makes absolutely no sense in the public realm, and might make precious little sense in the private one even, as Chapter 3 proves.

### Solar Tradeoff 2AC

#### No tradeoff – abundance and France prove

**Tindale, 11** [Stephen Tindale is an associate fellow at the CER, June 2011, Center for European Reform, <http://www.cer.org.uk/sites/default/files/publications/attachments/pdf/2011/pb_thorium_june11-153.pdf>]

The money to support research and development of molten salt reactors need not be taken from renewables or other low-carbon energy supply options. There is more than enough money available in the existing subsidies for nuclear fusion. And the argument that governments which support any form of nuclear power overlook or downplay renewables is disproved by the example of France. France gets over three-quarters of its electricity from nuclear power stations. Yet the French government has supported onshore wind farms and is now giving subsides to offshore wind. It is also subsidising an expansion of the district heating system in Paris, to distribute heat from power stations burning energy crops and waste wood which would otherwise be wasted.

#### And, expansion can occur without a tradeoff – their ev relies on an incomplete model

Farrell, 12 [February 29th, “We need a 21st century electricity system to enable local clean energy”, http://thinkprogress.org/climate/2012/02/29/434440/clean-energy-trade-off-trade-in-obsolete-electric-grid/?mobile=nc

In a New York Times SundayReview piece last week – [Drawing the Line at Power Lines](https://www.nytimes.com/2012/02/19/sunday-review/drawing-the-line-at-power-lines.html?_r=2&hp) – Elisabeth Rosenthal suggested that our desire for clean energy will require significant tradeoffs:¶ There are pipelines, trains, trucks and high-voltage transmission lines. None of them are pretty, and all have environmental drawbacks. But if you want to drive your cars, heat your homes and watch TV, you will have to choose among these unpalatable options…¶ Perhaps the answer is simply that in an increasingly crowded powered-on world, we’re all going to have to accept that Governor Cuomo’s so-called energy highway is likely to traverse our backyard.¶ I disagree.¶ The future of American electricity policy is not about tradeoffs, but rather a chance to trade-in an obsolete, centralized paradigm for a local, clean energy future. Utilities would have us believe that new high-voltage transmission lines are necessary to get more wind and solar power. But the truth is that the American electricity industry refuses to embrace the fundamentally different nature of renewable energy: its ubiquity means that Americans can produce energy near where they use it, in an economically competitive manner, and at a community scale.¶ The 20th century electricity system was centrally controlled and centrally-owned, a necessary evil when coal, gas, and nuclear power plants had significant economies of scale and required enormous capital investments. The supply lines for these power plants were equally large, connecting far-off mines, oil and gas fields via rail and pipeline to these remote power plants, and big transmission lines in turn carried the electricity from these power plants to big urban centers.¶ An electricity system primarily powered by wind and solar is fundamentally different. Turbines and panels are always right at the fuel source, whether on a rural farm or an urban rooftop. And because their scale is substantially more amenable to community ownership, renewable energy can be built near to and provide economic benefits to the communities it powers.¶ The fundamental shift means Americans should trade-in an obsolete model of centralized energy generation for one that matches and builds support for the local energy opportunity.¶ Local ownership and its economic benefits should play a significant role. For example, researchers in Germany recently surveyed [local support for expanding wind energy production](http://energyselfreliantstates.org/content/community-ownership-boosts-support-renewables), comparing two towns with nearby wind farms. When the local turbines were absentee-owned, 60 percent of residents were opposed to more local wind power. Opposition dropped by 45 percentage points when the wind farm was locally owned. It’s no different from the fight over the Badger-Coulee transmission line in Western Wisconsin, where locals have raised hell knowing that they will be asked to pay as much as $5 billion for new transmission lines that will earn utilities an 11% (or greater) return with questionable local economic benefit.¶ Locally owned wind power is in short supply, however, because federal and state energy policy make it extremely difficult. Community ownership could be best achieved through cooperatives, schools, or cities, but federal wind incentives are for taxable entities, not these rooted community organizations. Furthermore, federal tax credits require wind power project participants to have “passive income” from investments, ruling out the vast majority of Americans. When community wind projects succeed, like the [South Dakota Wind Partners](http://energyselfreliantstates.org/content/change-federal-incentive-enables-cooperative-own-wind-project), organizers admit that repeated the success is unlikely in light of the legal and financial complexities.¶ Community-scaled wind and solar projects also struggle against an electricity system stacked against small-scale or “distributed” generation. A recent study in Minnesota, for example, suggested that [the state could meet its entire 25% by 2025 renewable energy standard with distributed renewable energy projects](http://www.newrules.org/energy/publications/meeting-minnesotas-renewable-energy-standard-using-existing-transmission-system) connected to existing electric grid infrastructure. Incumbent utilities have focused on transmission instead, likely because new power lines (and not maximizing existing infrastructure) earns them a statutory 11-13% rate of return.¶ This myopic focus on big infrastructure may prove doubly expensive as the cost of solar power falls rapidly. Within 10 years, one-third of Americans could install solar on their own rooftop and get electricity for less than their utility charges, without any additional power lines. But under the current electricity policy, these same Americans will likely be paying a few dollars each month for new utility-conceived high-voltage transmission lines even as they increasingly produce their own local, clean energy.¶ The future of American energy policy is not a tradeoff between new clean energy and new transmission. Rather, it’s an opportunity to trade-in an obsolete, centralized model of development for the alternative – a democratized energy system where Americans can be producers and owners of their energy future.

#### Renewables dead

**Burgess 11** [“How Will Renewable Energy Fare in 2012?”, James Burgess, 20 December 2011, Oil Price analyst, Business Management, University of Nottingham]

Renewable energy is considered the future. The best way for us to combat climate change, survive the decline of oil and generally provide cheap, safer, secure energy. However the industry is still in its infancy and relies heavily on government subsidies and tax incentives. Every year or two the renewable energy companies experience a few tense months as the subsidies and incentives approach their expiration date. Invariably Congress comes to the rescue at the 11th hour and extends them for another year or two, the companies can breathe a sigh of relief and everyone can enjoy the holidays relatively stress free. However this year could prove to be different. We are in the midst of a presidential election year where the Republicans are using the bankruptcy of Solyndra to slam the Obama administration’s green energy policies. As a result Congress may well let the tax breaks die.¶ During the depths of the recession in 2009 the Obama administration gave renewable energy developers the option of taking a 30% tax credit as there weren’t many project financiers left with sufficient profits. Congress at the end of 2010 extended the program for another year, and now time’s up.¶ According to Joe Desmond, senior vice president of communications and government affairs for BrightSource Energy, fears that the solar industry would just be back in 12 months time asking for another extension are erroneous. The extension is only needed to bridge the gap until the economy improves sufficiently and a permanent financing program can be created. “As soon as the economy recovers, it takes the burden off of having to request an extension.” he said. He makes the point that, “the problem remains … there are tax equity investors out there. But it remains insufficient to serve the anticipated demand moving forward until the economy recovers.” Or, to put it another way, there are too many projects, such as the multibillion-dollar solar thermal power stations BrightSource builds or the residential rooftop photovoltaic systems SolarCity leases, and too few investors.¶ The Solar Energy Industries Association conducted a survey that found that nearly 37,000 jobs would not be created in 2012 if the cash grant program expires at the end of 2011, and that would be on top of the jobs lost due to renewable energy companies going bankrupt without the federal support. “More than 100,000 Americans work in the solar industry, double the number in 2009,” Rhone Resch, the chief executive of the solar trade group, said in a statement. “Solar is a proven job creator at a time when the unemployment rate for the country remains stubbornly high.”¶ Desmond also noted that two of BrightSource’s solar power plants set for production will create $800 million in wages, with each employing more than a thousand workers. Meanwhile, The American Wind Energy Association has released a study that predicted an extension of the production tax credit would create 54,000 jobs over the next four years.¶ Without the grants all renewable energy projects would rely on pre-grant incentives, such as tax equity markets, but the tax equity market still hasn’t recovered since the 2008 crash. According to Jeff Davis, a partner and co-head of the renewable energy practice at Mayer Brown, “we are still in a situation that we've been in since 2008 where the tax capacity or the ability to monetize those production tax credits and investment tax credits hasn't really recovered."¶ Jonathan Postal, senior vice president at Main Street Power, thinks we'll see more innovation in deal financing, similar to before the grant was passed. "You're going to need multiple partners, different ownership structures. Banks aren't going to just do the financing,” he said, "it's going to make things significantly more challenging.”¶ Financiers in the renewable energy market have all agreed that 2012 will be tough, no matter how you look at it. That, whilst the beginning of the year should be fine due to the completion of projects that began under the grant, the second half could well be very difficult.

#### Solar can't solve –A. Operates at 20%; one coal plant beats all the solar in the world

Savinar, 08. Esq. of LATOC. ( Matthew David, Life After the Oil Crash, <http://www.lifeaftertheoilcrash.net/secondpage.html>, accessed July 9, 2008)

In the real world, the average solar cell operates at about 20% of its maximum capacity. This means the combined output of all the solar cells in the world is equal to less than 40% of the output of a single coal fired power plant. UPDATE:By end of last year, there was just over 5,000 megawatts of solar pv cells installed worldwide. Operating at average efficiency of 20%, the combined output of all the pv cells in the world is now equal to the output of a single coal fired power-planet.

#### B. Not enough land

McCluney 2K3 [Ross, June 14, 2003, "Renewable Energy Limits", Page 4, <http://www.fsec.ucf.edu/en/publications/pdf/FSEC-GP-216-03.PDF>]

There are physical limits to the production of energy from direct solar radiation. In the absurd limit, we clearly could not cover all available land area with solar collectors. A more reasonable limit would be to fill existing future rooftops with solar collectors. From data provided by the U.S. Energy Information Administration, I estimated the total combined commercial and residential building roof area in the United States in the year 2000 at 18 billion square meters. From a National Renewable Energy Laboratory web site, I found that the approximate annual average quantity of solar energy falling on a square meter of land area in the United States is about 4.5 kWh of energy per square meter of area per day. Multiplying this by 365 days in a year and by the 18 billion square meter roof area figure, yields the total energy received by rooftop solar systems in this scenario: 2.46 x 10 ^ 13 kWh per year, or 84 Quads per year. This is just a bit below the 102 Quads per year U.S primary energy consumption figure. Not all roof areas is usable, however. Roofs sloped away from the sun's strongest radiation, shaded by trees and other buildings, having interfering equipment, or insufficiently strong to support solar equipment, are either not practical or not possible for this utilization.

#### C. Intermittency and requires fossil fuels

Choi 08. (Charles, February 27, Livescience.com, "Solar Power's Greenhouse Emissions Measured," <http://www.livescience.com/environment/080227-solar-power-green.html>)

"One of the most promising photovoltaic technologies is based on cadmium telluride, but cadmium is one of the worst heavy metals. Still, if we compare direct emissions from production of cadmium telluride cells with coal power plants, toxic emissions would up 300 times lower," said researcher Vasilis Fthenakis, an environmental engineer at Brookhaven National Laboratory in Upton, N.Y. In fact, most of the toxic emissions from making solar cells come indirectly from fossil fuel-burning power plants, which provide the electricity needed for manufacture. Ironically, the solar cell factories will likely need to rely on fossil fuels for power for a while, since solar power is too intermittent to use, Fthenakis explained, shutting down as it does when sun goes down.

#### D. Can’t solve – silver

Matt Savinar, Poly Sci UCDavis, J.D. @ UC Hastings 2004, <http://www.unicamp.br/fea/ortega/eco/traducao-DieOff.pdf>, p. 58

The geographic areas most suited for large solar farms are typically very warm areas, such as deserts. This requires the energy collected by the panels to be converted to electricity and then transmitted over large distances to power more densely populated regions. Unfortunately, heat makes electricity extremely difficult to transmit. The benefits of setting up solar farms in sun-drenched areas like the desert are largely offset by the additional costs of transmitting the electricity. The only way to overcome this problem is through the use of superconducting wires, which require copious quantities of silver, a precious metal already in short supply.

#### Not a bridge fuel – can’t solve and turns their renewables stuff

**Jones 12** [Christopher F. Jones, C, Wantrup Fellow, University of California-Berkeley, “Natural Gas: Bridge or Dead End?”, Huffington Post, 08/29/2012]

Natural gas is often touted as a bridge fuel: an interim step between the heavily polluting fossil fuels we depend on today and the clean renewable energy systems we hope for tomorrow. But the infrastructure we deploy to increase natural gas may actually inhibit the transition to solar and wind power. Rather than a bridge, natural gas may be a dead end.¶ The idea of natural gas as a bridge draws on three main points. First, natural gas produces significantly less carbon dioxide than coal or oil. Second, it releases fewer impurities like sulfur and mercury compared with other fossil fuels. Third, many experts anticipate that obtaining even 20 percent of our energy from renewables in the next couple decades will be difficult. Natural gas, advocates argue, offers a more realistic large-scale carbon reduction strategy in the short-term because we have already addressed many of the technical challenges of producing, transporting, and consuming it.¶ These considerations merit attention from the pragmatic environmentalist. Greatly reducing carbon emissions without lowering overall energy consumption is a laudable goal if it can be done in an environmentally responsible manner. Yet in addition to thinking about how we build a natural gas bridge, it is imperative that we devote equal attention to how we get off. A good bridge requires off-ramps. If we consider the role of infrastructure in energy transitions, this might be harder than we think.¶ Critics of natural gas have typically focused on issues of pollution rather than infrastructure. First, there has been widespread opposition to 'fracking' shale gas reserves, a process that may contaminate drinking water, trigger minor earthquakes, and produce many other environmental consequences. Second, there are debates over whether natural gas really has a beneficial impact on climate. It may produce less greenhouse gas, but leaks of methane might more than offset these gains. These are important issues, but it is also worth examining the impact that expanding natural gas infrastructure will have on renewable energy systems.¶ Building a natural gas bridge will require a significant expansion of infrastructure: drilling wells for production, pipelines for distribution, and a range of devices for consumption including power plants, home furnaces, and industrial ovens. Investing in these systems will increase the supply of natural gas and lower its costs through economies of scale. As a result, consumers will find it cheaper and easier to use natural gas. This is a straightforward account of what infrastructure does -- it facilitates certain types of behaviors.¶ What is less appreciated is the fact that infrastructure cuts two ways. These systems will not simply provide an advantage for natural gas; they will make it progressively harder and more expensive to transition to renewables. We can examine this point by thinking about relative prices and sunk costs.¶ Relative prices often matter more than absolute prices for energy transitions. For consumers, it is not simply the price of an energy source that matters; it is how much more or less that energy source costs than other options. Right now, natural gas is already cheaper than solar and wind for electricity production in most analyses. With significant investments in natural gas infrastructure, this price gap is only likely to grow. Therefore, even though the absolute price of renewable energy will not change, wind and solar will become less attractive to consumers because they will cost relatively more.¶ What's more, these inequalities are likely to become more extreme over time due to sunk costs. Most of the systems designed to burn natural gas, like furnaces and electrical generating equipment, are expensive and designed to last for decades. Once large sums have been paid to purchase such systems, short-term price changes matter far less to consumers. Even if natural gas triples in price, prior investments in these systems will still act as a disincentive for switching to renewables. The sunk costs in infrastructure, therefore, further suggest that once we get on the bridge, it will be hard to get off.

#### No econ impact

Robert Jervis 11, Professor in the Department of Political Science and School of International and Public Affairs at Columbia University, December 2011, “Force in Our Times,” Survival, Vol. 25, No. 4, p. 403-425

Even if war is still seen as evil, the security community could be dissolved if severe conflicts of interest were to arise. Could the more peaceful world generate new interests that would bring the members of the community into sharp disputes? 45 A zero-sum sense of status would be one example, perhaps linked to a steep rise in nationalism. More likely would be a worsening of the current economic difficulties, which could itself produce greater nationalism, undermine democracy and bring back old-fashioned beggar-my-neighbor economic policies. While these dangers are real, it is hard to believe that the conflicts could be great enough to lead the members of the community to contemplate fighting each other. It is not so much that economic interdependence has proceeded to the point where it could not be reversed – states that were more internally interdependent than anything seen internationally have fought bloody civil wars. Rather it is that even if the more extreme versions of free trade and economic liberalism become discredited, it is hard to see how without building on a preexisting high level of political conflict leaders and mass opinion would come to believe that their countries could prosper by impoverishing or even attacking others. Is it possible that problems will not only become severe, but that people will entertain the thought that they have to be solved by war? While a pessimist could note that this argument does not appear as outlandish as it did before the financial crisis, an optimist could reply (correctly, in my view) that the very fact that we have seen such a sharp economic down-turn without anyone suggesting that force of arms is the solution shows that even if bad times bring about greater economic conflict, it will not make war thinkable.

### Accidents/Meltdowns 2AC

NU

**Ferguson 12** [“Nuclear Power's Uncertain Future”, Charles D. Ferguson, President of the Federation of American Scientists, March 15, 2012, khirn]

On the opposite side of the world, China has about two dozen reactors under construction and many more planned. After the Fukushima accident, Beijing temporarily halted construction and said the right words about making sure safety is a top priority. But the real test will be its follow-through in training the legions of people who can safely operate and inspect these reactors. **The toughest challenge will be instilling a safety culture in which everyone at a nuclear plant can report safety violations** without fear of retribution. Although China’s rate of nuclear construction is impressive, the pace of its building coal plants as well as installing wind turbines and solar power is even more brisk. India also has grand nuclear-expansion plans, but antinuclear protesters have stymied completion of a Russian-built plant at Kandukulam as well as startup of new projects. In December 2004, the great tsunami that swept through the Indian Ocean raised concerns about the vulnerability of some Indian nuclear plants. In response to Fukushima, South Korea gave its regulatory agency more authority. While also vulnerable to earthquakes and tsunamis, the country has a severe shortage of indigenous sources of fuels, so its national policy has emphasized expanding nuclear power’s capacity to generate more than half of its electricity by 2030. Seoul has also developed a successful model for building nuclear plants, paying close attention to costs and project management. Its most recent plant was reportedly built within budget and on time. The Koreans are determined to demonstrate this model in the United Arab Emirates, which in December 2009 ordered four large reactors from South Korea at the price of about $20 billion. If successful, the UAE project could set the stage for competitive nuclear power. Jordan and Vietnam are already taking note of this model, but because they are much poorer countries than the UAE, they have been shopping around for massive loans to support their nuclear plans. It remains to be seen whether Jordan and Vietnam and other potential new nuclear entrants will end up like the Philippines, which recently turned its completed but nonoperational Bataan Nuclear Power Plant into a tourist destination. At least this plant is earning revenue.

#### Chernobyl proves there’s no permanent impact on the environment.

Bosselman, ‘7

[Fred, Professor of Law Emeritus, Chicago-Kent College of Law, “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, Lexis]

C. "But What About Chernobyl?" 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](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n247) 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](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n248) 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](http://www.lexis.com/research/retrieve?_m=4a9f74e9d68358dde5b1da7c76fcc08d&docnum=49&_fmtstr=FULL&_startdoc=1&wchp=dGLbVlz-zSkAB&_md5=b940f69f179ebb657dc94d1baf8c0fbd#n254) [\*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)

#### Nuclear power is safe -- no meltdowns and no impact.

**Svoboda, ‘10**

[Elizabeth, Popular Mechanics, “Debunking the Top 10 Energy Myths”, 7-7, http://www.popularmechanics.com/science/energy/debunking-myths-about-nuclear-fuel-coal-wind-solar]

Myth No. 1 Nuclear Power Isn't a Safe Solution In a recent national poll, 72 percent of respondents expressed concern about potential accidents at nuclear power plants. Some opinion-makers have encouraged this trepidation: Steven Cohen, executive director of Columbia University's Earth Institute, has called nuclear power "dangerous, complicated and politically controversial." During the first six decades of the nuclear age, however, fewer than 100 people have died as a result of nuclear power plant accidents. And comparing modern nuclear plants to Chernobyl—the Ukrainian reactor that directly caused 56 deaths after a 1986 meltdown—is like comparing World War I fighter planes to the F/A-18. Newer nuclear plants, including the fast reactor now being developed at Idaho National Laboratory (INL), contain multiple auto-shutoff mechanisms that reduce the odds of a meltdown exponentially—even in a worst-case scenario, like an industrial accident or a terrorist attack. And some also have the ability to burn spent fuel rods, a convenient way to reuse nuclear waste instead of burying it for thousands of years. Power sources such as coal and petroleum might seem safer than nuclear, but statistically they're a lot deadlier. Coal mining kills several hundred people annually—mainly from heart damage and black lung disease, but also through devastating accidents like the April mine explosion in West Virginia. The sublethal effects of coal-power generation are also greater. "The amount of radiation put out by a coal plant far exceeds that of a nuclear power plant, even if you use scrubbers," says Gerald E. Marsh, a retired nuclear physicist who worked at Argonne National Laboratory. Particulate pollution from coal plants causes nearly 24,000 people a year to die prematurely from diseases such as lung cancer. Petroleum production also has safety and environmental risks, as demonstrated by the recent oil spill in the Gulf of Mexico. INL nuclear lab's deputy associate director, Kathryn McCarthy, thinks the industry can overcome its stigma. "It's been a long time since Chernobyl and Three Mile Island," McCarthy says, "and people are willing to reconsider the benefits of nuclear energy." Nuclear plants emit only a tiny fraction of the carbon dioxide that coal plants do, and a few hundred nuclear facilities could potentially supply nearly all the energy the United States needs, reducing our dependence on fossil fuels.

#### IFR’s are really safe

**Brook 9** [“Response to an Integral Fast Reactor (IFR) critique”, 21 February 2009 by Barry Brook, professor in the School of Earth and Environmental Sciences at the University of Adelaide, where he holds the Sir Hubert Wilkins Chair of Climate Change]

¶ 8. Brook says IFR reactors would be “safe from melt down” which is nonsense because technologies fail, well-intentioned humans err, and because the best laid plans can go awry if reactors are subject to sabotage or outside attack…¶ [BWB] The laws of physics say that this is not nonsense. For instance, the metal fuel pins’ composition is such that if they begin to overheat, the resulting expansion decreases their density to the point where the fission reaction simply shuts down. This is not speculation — it’s been tested and verified. I quote:¶ “The IFR gains safety advantages through a combination of metal fuel (an alloy of uranium, plutonium, and zirconium), and sodium cooling. By providing a fuel which readily conducts heat from the fuel to the coolant, and which operates at relatively low temperatures, the IFR takes maximum advantage of expansion of the coolant, fuel, and structure during off-normal events which increase temperatures. The expansion of the fuel and structure in an off-normal situation causes the system to shut down even without human operator intervention. In April of 1986, two special tests were performed on the Experimental Breeder Reactor II (EBR-II), in which the main primary cooling pumps were shut off with the reactor at full power (62.5 Megawatts, thermal) – By not allowing the normal shutdown systems to interfere, the reactor power dropped to near zero within about 300 seconds. No damage to the fuel or the reactor resulted. This test demonstrated that even with a loss of all electrical power and the capability to shut down the reactor using the normal systems, the reactor will simply shut down without danger or damage. The same day, this demonstration was followed by another important test. With the reactor again at full power, flow in the secondary cooling system was stopped. This test caused the temperature to increase, since there was nowhere for the reactor heat to go. As the primary (reactor) cooling system became hotter, the fuel, sodium coolant, and structure expanded, and the reactor shut down. This test showed that an IFR type reactor will shut down using inherent features such as thermal expansion, even if the ability to remove heat from the primary cooling system is lost. Events such as the loss of water to the steam system would cause a condition such as the test demonstrated. Another major feature of the IFR concept is that the reactor uses a coolant, sodium, which does not boil during normal operation nor even in overpower transients such as described above. This means that the coolant is not under significant pressure. When coolant is not under pressure, the reactor can be placed in a “pool” of coolant, contained in a double tank, so that there is no real possibility for a loss of coolant. Even if the normal pumps are lost, some coolant flow through the reactor occurs due to natural convection. The features described above allow for greater simplification of a nuclear plant, resulting in cost savings, greater ease in operation, and a safety system that relies on natural phenomenon that cannot be defeated by human error. “

### Adv CP 2AC

#### Natural gas is a dirty bridge – it bought us time, but failure to transition ensures worse warming

**Nordhause 12** [Ted Nordhaus, Chairman of the Breakthrough Institute, and Michael Shellenberger, President of the Breakthrough Institute, 2-27-2012, "Beyond Cap and Trade, A New Path to Clean Energy," Yale Environment 360]

A funny thing happened while environmentalists were trying and failing to cap carbon emissions in the U.S. Congress. U.S. carbon emissions started going down. The decline began in 2005 and accelerated after the financial crisis. The latest estimates from the U.S. Energy Information Administration now suggest that U.S. emissions will continue to decline for the next few years and remain flat for a decade or more after that.¶ The proximate cause of the decline in recent years has been the recession and slow economic recovery. But the reason that EIA is projecting a long-term decline over the next decade or more is the glut of cheap natural gas, mostly from unconventional sources like shale, that has profoundly changed America’s energy outlook over the next several decades.¶ Gas is no panacea. It still puts a lot of carbon into the atmosphere and has¶ created a range of new pollution problems at the local level. Methane leakage resulting from the extraction and burning of natural gas threatens to undo much of the carbon benefit that gas holds over coal. And even were we to make a full transition from coal to gas, we would then need to transition from gas to renewables and nuclear in order to reduce U.S. emissions deeply enough to achieve the reductions that climate scientists believe will be necessary to avoid dangerous global warming.

**US leadership in reprocessing supercharges conversion of HEU**

**Timbers 3** William Timbers president and CEO of the USEC, explains in 2k3: Timbers, President and Chief Executive Officer USEC Inc, 9-19-2k3

(William, "Nuclear Power & Global Security: Mutual Interest, Mutual Opportunities, Delivered at the Carnegie Endowment for International

Peace Second International Non-Proliferation Conference Moscow, Russia. P. <http://www.usec.com/v2001_02/Content/News/Speeches/09-19-03-CEIPMoscowRe>marks.pdf )

While significant steps have been taken by Russia and the United States to strengthen the security of stored fissionable nuclear materials, a different approach goes right to the heart of the matter—the very elimination of nuclear warhead materials.

After several years of consultations, in 1993 Russia and the United States formally agreed to a 20-year, $12 billion program to eliminate 500 metric tons of highly enriched uranium (HEU) taken from dismantled Russian warheads. To put this in perspective, 500 metric tons of HEU is the equivalent of more than 20,000 nuclear warheads. This U.S.-Russian agreement is often referred to it as the “HEU-LEU” agreement or “the Russian HEU Agreement.” We, who are responsible for commercially implementing this agreement, call it the “Megatons to Megawatts” program. I want to take a moment to acknowledge that, over the years, many of you—both Russians and Americans—have played a vital role in making this HEU to LEU program possible and in helping to ensure its continuity. You can be justifiably proud of your role in making this remarkable effort a success. For those of you who are not familiar with Megatons to Megawatts, you may be wondering why a private sector company is involved. That is because the 1993 U.S.-Russian Agreement requires that it be implemented strictly on commercial terms. Simply put, the strategy of the two governments was to ensure that a substantial amount of excess weapons material was irreversibly converted to peaceful uses as quickly as possible and to utilize the dynamics of the commercial market for nuclear fuel to pay for this effort. Their accurate assessment was that the program could commercially sustain itself over the 20-year period through the sale and purchase of fuel derived from warhead materials. Accordingly, in 1994 executive agents appointed by both governments signed a commercial implementing contract—Techsnabexport (TENEX) acting for the Russian government and the United States Enrichment Corporation (USEC) acting for the United States government. The value of this program also extends beyond its basic mission of eliminating nuclear warhead materials. There is also a human dimension. Proceeds from this program support thousands of Russian workers who take part in the process of transforming HEU into reactor fuel, who work on environmental cleanup and restoration and who enhance the safeguards for these materials. This underscores the importance of addressing issues concerning highly talented people who were previously involved in weapons programs. The talents of these dedicated scientists and engineers, representing a broad range of technical capabilities, can and should be utilized for non-weapons related work. Companies such as USEC stand ready to work with their Russian partners to facilitate and accelerate such endeavors. 2 When you consider the achievements of the Nunn-Lugar and Megatons to Megawatts programs and the human resources implications, it is clear that they have made a definite contribution to reducing the threat of nuclear weapons. But, what about the future? I believe that we can substantially increase the amount of nuclear warhead material that is eliminated by burning it as fuel in a new generation of commercial nuclear power stations. Regardless of where this bomb-grade material may come from, **its conversion into fuel will end its military value.** And last, but not least, the private sector can play a financial and facilitating role in making this happen. Today, the nuclear fuel market is in balance—supply is matching demand. A rapid increase in the number of nuclear power plants would increase the demand for nuclear fuel. While we would meet long-term demand primarily with expanded enrichment capacity, this new demand would also enable accommodation of additional fuel derived from nuclear warhead material. The good news is that we are at an intersection of mutual interests. It is increasingly evident that a global expansion of commercial nuclear power operations is being actively considered—especially in Russia, Asia and the United States. Several events are driving this trend. Events, such as increasing worldwide demand for electricity, power shortages, and global climate change, air pollution and growing dependency upon long, fragile lifelines of energy resources, are increasing the appeal of nuclear power. These factors present us with a unique opportunity. I believe there is a mutual interest among those who advocate the expansion of commercial nuclear power plants and those who seek to eliminate nuclear weapons materials. Advocates of nuclear nonproliferation can accelerate the increased elimination of nuclear bomb-grade materials and secure the dynamics of the marketplace to facilitate these activities Concerns about proliferation are often raised by those opposed to the further development of nuclear power. At the same time, it is widely recognized that there are numerous technical routes to produce nuclear warhead materials and that commercial nuclear power operations, with appropriate and rigorous fuel safeguards, is not the route of choice for those intent on securing weapons materials.

**That solves accidental Russian launch**

**Hecker 1** “Thoughts about an Integrated Strategy for Nuclear Cooperation with Russia”, The NonProliferation Review, Volume 8, Number 2, Dr. Siegfried S. Hecker is a Senior Fellow at the Los Alamos National Laboratory. He was Director of the laboratory from 1986 through 1997. Dr. Hecker has interacted closely with the Russian nuclear weapons complex since the exchange visit of Russian and U.S. nuclear weapons laboratory directors in February 1992.

Although the breakup of the Soviet Union has dramatically reduced the probability of a nuclear exchange, we must remain ever vigilant against the possibility of accidental or unauthorized launches. In the longer term, it will be important to develop a new strategy for strategic stability. The end of the Cold War and the U.S. move toward a national missile defense (NMD) clearly challenge the traditional strategies. A new strategy for strategic stability will evolve slowly and only after the role of traditional arms control, nuclear force structure balance, second-rank nuclear powers, and proliferation issues are reexamined.[14] Observations The cooperative and reciprocal measures taken to date by the United States and Russia to avoid accidental or unauthorized launches are not sufficient to guard against a potential nuclear catastrophe. The **deterioration in Russian military infrastructure and the abysmal economic conditions of its military servicemen have exacerbated the risk dramatically.**

**Global nuclear war**

**Forrow**, MD, **98**

(Lachlan, MD, et al, "Accidental Nuclear War – A Post-Cold War Assessment", New England Journal of Medicine)

Public health professionals now recognize that many, if not most, injuries and deaths from violence and accidents result from a predictable series of events that are, at least in principle, preventable.44,45 The direct toll that would result from an accidental nuclear attack of the type described above would dwarf all prior accidents in history. Furthermore, such an attack, even if accidental, might prompt a retaliatory response resulting in an all-out nuclear exchange. The World Health Organization has estimated that this would result in billions of direct and indirect casualties worldwide.4

**Nuclear power solves water wars**

**Beller 2004** - Dr., Department of Mechanical Engineering at UNLV, Chair of the Public Information Committee of the American Nuclear Society (Denis E., Journal of Land, Resources, & Environmental Law, "Atomic time machines: back to the nuclear future", 24 J. Land Resources & Envtl. L. 41, Lexis, WEA)

Our global neighbors need much more energy to achieve the standards of living of the developed world. One-third of the six billion people on Earth today lack access to electricity. n3 Another two billion use just 1000 kilowatt hours (kWh) per year, which is barely enough to keep a single 100-watt light bulb lit. n4 In addition, one billion people have no sanitary water, n5 which could [\*43] be provided easily and inexpensively if energy were available to operate desalination and/or purification plants. Energy is needed for development, prosperity, health, and international security. The alternative to development, which is easily sustained with ample energy, is suffering in the form of poverty, disease, and death. This suffering creates instability and the potential for widespread violence, such that national security requires developed nations to help increase energy production in their more populous developing counterparts.¶ The relationship between energy use and human well being is demonstrated by correlating the United Nations' Human Development Index (HDI) with the annual per capita use of electricity. The UN compiles the HDI for almost every nation annually. It is a composite of average education level, health and well being (average life expectancy), and per capita income or gross domestic product. One such correlation that was done a few years ago showed that electric consumption first increases human well being, then people who are well off increase their electric consumption. n6 Figure 1 illustrates this for almost every nation on Earth (the data includes more than 90 percent of the Earth's population). Note there is a threshold at about 4000 kWh per capita. Below this threshold, human development increases rapidly with increases in available electricity (there are, of course, exceptions to every rule). Above this threshold, use of electricity increases rapidly as people become more healthy, wealthy, and educated. A deeper investigation into the data underlying the HDI reveals the effects of what Dr. Eric Loewen, a delegate to the United Nations 2002 World Summit on Sustainable Development in Johannesburg, South Africa, now calls "energy apartheid." n7 People in the Western world, who have and use large amounts of energy, have a life expectancy of about eighty years, while those on the lower left side of this graph, undeveloped nations where most people have no access to electricity, will die decades earlier. Thus, billions of our global neighbors without sufficient electricity die decades before they should. Those who live in poverty live in the most dangerous of conditions.¶ Without substantial increases in electricity generation, the proportion of the Earth's population without sufficient electricity will increase in the next fifty years as it grows by 50 percent to near 9 billion people. n8 Preventing global conflict will require even more addition of electricity. The product of increased population and increased per capita energy usage by people who today have access to nearly none is a great growth in global electricity usage. Estimates [\*44] for future increases in energy and electricity use, even with substantial efficiency improvements and conservation efforts, range between doubling and tripling in the next fifty years. n9 Even with conservation, "energy star" appliances and homes, mandated fuel economy, massive government purchases of "renewables," and energy saving and efficiency measures, our use of electrical energy has been growing faster than total energy usage; electricity use in the United States increased 57 percent between 1980 and 2000, while total energy use increased just 27 percent. n10

**Water wars go nuclear**

**Weiner in ’90** (Jonathan, Pulitzer Prize winning author, “The Next One Hundred Years”, p. 270)

If we do not destroy ourselves with the A-bomb and the H-bomb, then we may destroy ourselves with the C-bomb, the Change Bomb. And in a world as interlinked as ours, one explosion may lead to the other. Already in the Middle East, from North Africa to the Persian Gulf and from the Nile to the Euphrates, tensions over dwindling water supplies and rising populations are reaching what many experts describe as a flashpoint. A climate shift in that single battle-scarred nexus might trigger international tensions that will unleash some of the 60,000 nuclear warheads the world has stockpiled since Trinity.

### States 2AC

#### Can’t solve nuclear leadership – not perceived

Fertel, 05 - Senior Vice President And Chief Nuclear Officer Nuclear Energy Institute (Marvin, CQ Congressional Testimony, “NUCLEAR POWER'S PLACE IN A NATIONAL ENERGY POLICY,” 4/28, lexis) //DH

Industry and government will be prepared to meet the demand for new emission-free baseload nuclear plants in the 2010 to 2020 time frame only through a sustained focus on the necessary programs and policies between now and then. As it has in the past, strong Congressional oversight will be necessary to ensure effective and efficient implementation of the federal government's nuclear energy programs, and to maintain America's leadership in nuclear technology development and its influence over important diplomatic initiatives like nonproliferation. Such efforts have provided a dramatic contribution to global security, as evidenced by the U.S.-Russian nonproliferation agreement to recycle weapons-grade material from Russia for use in American reactors. Currently, more than 50 percent of U.S. nuclear power plant fuel depends on converted Russian warhead material. Nowhere is continued congressional oversight more important than with DOE's program to manage the used nuclear fuel from our nuclear power plants. Continued progress toward a federal used nuclear fuel repository is necessary to support nuclear energy's vital role in a comprehensive national energy policy and to support the remediation of DOE defense sites. Since enactment of the 1982 Nuclear Waste Policy Act, DOE's federal repository program has repeatedly overcome challenges, and challenges remain before the Yucca Mountain facility can begin operation. But as we address these issues, it is important to keep the overall progress of the program in context. There is international scientific consensus that a deep geologic repository is the best solution for long-term disposition of used military and commercial nuclear power plant fuel and high-level radioactive byproducts. The Bush administration and Congress, with bipartisan support, affirmed the suitability of Yucca Mountain for a repository in 2002. Over the past three years, the Energy Department and its contractors have made considerable progress providing yet greater confirmation that this is the correct course of action and that Yucca Mountain is an appropriate site for a national repository. --During the past year, federal courts have rejected significant legal challenges by the state of Nevada and others to the Nuclear Waste Policy Act and the 2002 Yucca Mountain site suitability determination. These challenges questioned the constitutionality of the Yucca Mountain Development Act and DOE's repository system, which incorporates both natural and engineered barriers to contain radioactive material safely. In the coming year, Congress will play an essential role in keeping this program on schedule, by taking the steps necessary to provide increased funding for the project in fiscal 2006 and in future years. Meeting DOE's schedule for initial repository operation requires certainty in funding for the program. This is particularly critical in view of projected annual expenditures that will exceed $1 billion beginning in fiscal 2007. Meeting these budget requirements calls for a change in how Congress provides funds to the project from monies collected for the Nuclear Waste Fund. The history of Yucca Mountain funding is evidence that the current funding approach must be modified. Consumer fees (including interest) committed to the Nuclear Waste Fund since its f6rmation in 1983 total more than $24 billion. Consumers are projected to pay between $750 million to $800 million to the fund each year, based on electricity generated at the nation's 103 reactors. This is more than $2 million per day. Although about $8 billion has been used for the program, the balance in the fund is nearly $17 billion. In each of the past several years, there has been a gap between the annual fees paid by consumers of electricity from nuclear power plants and disbursements from the fund for use by DOE at Yucca Mountain. Since the fund was first established, billions of dollars paid by consumers of electricity from nuclear power plants to the Nuclear Waste Fund-intended solely for the federal government's used fuel program-in effect have been used to decrease budget deficits or increase surpluses. The industry believes that Congress should change the funding mechanism for Yucca Mountain so that payments to the Nuclear Waste Fund can be used only for the project and be excluded from traditional congressional budget caps. Although the program should remain subject to congressional oversight, Yucca Mountain appropriations should not compete each year for funding with unrelated programs when Congress directed a dedicated funding stream for the project.¶ The industry also believes that it is appropriate and necessary to consider an alternative perspective on the Yucca Mountain project. This alternative would include an extended period for monitoring operation of the repository for up to 300 years after spent fuel is first placed underground. The industry believes that this approach would provide ongoing assurance and greater confidence that the repository is performing as designed, that public safety is assured, and that the environment is protected. It would also permit DOE to apply evolving innovative technologies at the repository. Through this approach, a scientific monitoring program would identify additional scientific information that can be used in repository performance models. The project then could update the models, and make modifications in design and operations as appropriate.¶ Congressional committees like this one can help ensure that DOE does not lose sight of its responsibility for used nuclear fuel management and disposal, as stated by Congress in the Nuclear Waste Policy Act of 1982. The industry fully supports the fundamental need for a repository so that used nuclear fuel and the byproducts of the nation's nuclear weapons program are securely managed in an underground, specially designed facility. World-class science has demonstrated that Yucca Mountain is the best site for that facility. A public works project of this magnitude will inevitably face challenges. Yet, none is insurmountable. DOE and its contractors have made significant progress on the project and will continue to do so as the project enters the licensing phase. Congressional oversight also can play a key role in maintaining and encouraging the stability of the NRC's regulatory process. Such stability is essential for our 103 operating nuclear plants and equally critical in licensing new nuclear power plants. Congress played a key role several years ago in encouraging the NRC to move toward a new oversight process for the nation's nuclear plants, based on quantitative performance indicators and safety significance. Today's reactor oversight process is designed to focus industry and NRC resources on equipment, components and operational issues that have the greatest importance to, and impact on, safety. The NRC and the industry have worked hard to identify and implement realistic security requirements at nuclear power plants. In the three-and-a-half years since 9/11, the NRC has issued a series of requirements to increase security and enhance training for security programs. The industry complied-fully and rapidly.¶ In the days and months following Sept. 11, quick action was required. Orders that implemented needed changes quickly were necessary. Now, we should return to the orderly process of regulating through regulations.¶ The industry has spent more than $1 billion enhancing security since September 2001. We've identified and fixed vulnerabilities. Today, the industry is at the practical limit of what private industry can do to secure our facilities against the terrorist threat. NRC Chairman Nils Diaz and other commissioners have said that the industry has achieved just about everything that can be reasonably achieved by a civilian force.¶ The industry now needs a transition period to stabilize the new security requirements. We need time to incorporate these dramatic changes into our operations and emergency planning programs and to train our employees to the high standards of our industry-and to the appropriately high expectations of the NRC.¶ Both industry and the NRC need congressional oversight to support and encourage this kind of stability.¶ CONCLUSION¶ Electricity generated by America's nuclear power plants over the past half-century has played a key part in our nation's growth and prosperity. Nuclear power produces over 20 percent of the electricity used in the United States today without producing air pollution. As our energy demands continue to grow in years to come, nuclear power should play an even greater role in meeting our energy and environmental needs.¶ The nuclear energy industry is operating its reactors safely and efficiently. The industry is striving to produce more electricity from existing plants. The industry is also developing more efficient, next-generation reactors and exploring ways to build them more cost-effectively.¶ The public sector, including the oversight committees of the U.S. Congress, can help maintain the conditions that ensure Americans will continue to reap the benefits of our operating plants, and create the conditions that will spur investment in America's energy infrastructure, including new nuclear power plants.¶ One important step is passage of comprehensive energy legislation that recognizes nuclear energy's contributions to meeting our growing energy demands, ensuring our nation's energy security and protecting our environment. Equally important, however, is the need to ensure effective and efficient implementation of existing laws, like the Nuclear Waste Policy Act, and to provide federal agencies with the resources and oversight necessary to discharge their statutory responsibilities in the most efficient way possible. The commercial nuclear power sector was born in the United States, and nations around the world continue to look to this nation for leadership in this technology and in the issues associated with nuclear power. Our ability to influence critical international policies in areas like nuclear nonproliferation, for example, depends on our ability to maintain a leadership role in prudent deployment, use and regulation of nuclear energy technologies here at home, in the United States, and on our ability to manage the technological and policy challenges-like waste management-that arise with all advanced technologies.

#### Uncertainty means no nuke power

**Ragheb, 12** [March, RESTARTING THE STALLED USA NUCLEAR RENAISSANCE, Ph.D., Nuclear Engineering/Computer Sciences, Univ. of Wisconsin, Madison, 1978 M.Sc., Nuclear Engineering, Univ. of Wisconsin, Madison, 1974 M.Sc., Nuclear Engineering, Science Centre for Postgraduate Studies, Univ. of Alexandria, Undp-Unesco, 1973 B.Sc., Nuclear Engineering, Univ. of Alexandria, 1970 Associate Professor, 1986 - present Faculty Visitor, Interdisciplinary Research Center, National Center for Supercomputing Applications (NCSA), Univ. of Illinois at Urbana-Champaign, 1985 -1987 Assistant Professor, 1979-1986

<https://netfiles.uiuc.edu/mragheb/www/NPRE%20402%20ME%20405%20Nuclear%20Power%20Engineering/Restarting%20the%20USA%20Stalled%20Nuclear%20Renaissance.pdf>]

The status of the Nuclear Renaissance worldwide and in the USA is discussed. The March 11, 2011 earthquake and tsunami Station Blackout accident at the Fukushima Daiichi site caused an unprecedented cascading multiple failures event including fuel damage in both reactor cores and spent fuel storage pools, and ensuing hydrogen explosions and fires associated with fission products releases. This induced a global review of nuclear safety practices worldwide and ongoing projects. This is compounded by low natural gas prices. In addition, uncertainty about federal loan guarantees for the project suggests a delay and even a cancellation, plunging the nascent nuclear renaissance back into the dark ages. A glimmer of hope appeared in February 2012. For the first time since the Three Mile Island accident in 1979, the USA Nuclear Regulatory Commission (USNRC) approved the construction of two new Toshiba-Westinghouse 1,000 MWe plants at accost of $14 billion which are scheduled to go online in 2016. The new reactors are part of an expansion of the Vogtle Electric Generating Plant operated by the energy supplier Southern Company near the city of Augusta, Georgia. If the USA nuclear industry is to continue supplying 20 percent of its electrical energy supply, there is no way to avoid building new plants. The fact is that many of the 104 nuclear reactors currently in service in the USA are extremely old, and most of them have already been operating for over 30 years. To buy time, since 2000, the USNRC has extended the operational life span of 71 reactors to 60 years. The main concern are 23 aged BWRs, constructed by the General Electric (GE) Company which are of the same design as the Fukushima reactors.

**Doesn’t solve economy**

**ENR 9** [7/22/2009, <http://enr.construction.com/opinions/editorials/2009/0722-StifleTheEconomy.asp>, [[Engineering News-Record, Taxing the Wealthy Even More Will Stifle the Economy”] //khirn

As America digs itself deeper into a financial hole, Congress and states are using a venerable political ploy to justify even more spending: increasing taxes on the wealthy and big companies ostensibly to help those with less. That ploy may have worked in the early 1900s when big bosses often were so-called robber barons. Today, however, even people at the bottom of the economic ladder realize wealthy individuals help fuel the nation’s economic development in important ways. The U.S. is a democracy, but wealthy individuals faced with confiscatory taxes can easily vote with their feet by moving their operations and themselves to other states or countries. It is easier than most people think, as demonstrated by the recent trend of corporations moving headquarters to Switzerland to avoid multiple taxation on income. Many construction executives participating in ENR’s construction confidence survey complain about President Obama’s proposed plan to increase taxes on the wealthy and companies to pay for the economic stimulus, health-care reform and pet projects. Enough is enough, they say. “Obama wants to cut open the golden goose to see if there are any more eggs left,” one says. The federal debt now has ballooned past $11.6 trillion, and nations with dollar reserves and investments are nervous. In addition, the federal economic-stimulus program, company bailouts and other guarantees potentially could cost taxpayers up to $23.7 trillion, according to an estimate delivered to the House by the inspector general of the Troubled Asset Relief Program. That does not sit well with people who are used to balancing their books. They also are unhappy about the resurrection of the so-called death tax. Buried in President Obama’s federal budget is an item that keeps the federal estate tax at 2009 levels instead of letting the tax lapse in 2010, as called for in current legislation. This amounts to one of the largest tax hikes in history. Estates of people who already have paid taxes on their earnings can be taxed up to 45%. The fact that the tax applies only to a limited number of people because of exemptions does not help a family that is trying to preserve a construction firm, farm or other business. In the end, what does “wealthy” really mean? When income and other assets are taxed over and over by multiple jurisdictions, wealth evaporates quickly, as does the motivation to accumulate and invest it. When you have to give most of it to the government, it is easier to join the less fortunate. That does nothing for the economy.

### Elections 2AC

#### Romney’s impact on Russian relations is unclear

The Economist 9/1 (9/1/12, Romney Could Screw Up US Relations With Russia, <http://www.businessinsider.com/mitt-romneys-foreign-policy-chops-come-into-light-2012-9>, RBatra)

At the same time, the potential impact of a Romney presidency should not be exaggerated. Mr Romney is not an ideological politician, and he will have solid reasons to maintain a working relationship with Russia. These include reliance on Russian transit corridors to support US forces in Afghanistan to 2015 and beyond, Russia's veto in the UN Security Council, and its potential to act as interlocutor between the US and rogue states. Finally, there is a significant element of uncertainty that stems from the lack of clarity about what Mr Romney, who has often changed his position, actually stands for. In particular, the extent of the influence on him of several competing Republican foreign policy schools (neo-conservativism, populist isolationism, realism, liberal internationalism) is unclear.

#### Putin a/c

**Weiss 6-19** – Founder and Chief Executive Officer of Weiss Asset Management, a Boston-based investment firm,[[2]](http://en.wikipedia.org/wiki/Andrew_Weiss_%28economist%29#cite_note-time-1) and Professor Emeritus [Boston University](http://en.wikipedia.org/wiki/Boston_University) (Andrew, 2012, “[Putin's Waiting Game](http://www.foreignpolicy.com/articles/2012/06/19/waiting_game)” <http://www.foreignpolicy.com/articles/2012/06/19/waiting_game?page=full>) Jacome

The most important yet overlooked aspect of the current situation, however, may be the cynicism and casual indifference that Putin has displayed toward the U.S.-Russian relationship in the face of his much bigger problems at home. At the moment, Putin appears to be preoccupied by the political mess created by his decision to [switch jobs with Medvedev](http://www.nytimes.com/2012/05/09/world/europe/slight-hiccup-as-putin-and-medvedev-switch-jobs-in-russia.html) and the [badly flawed Duma elections](http://www.bbc.co.uk/news/world-europe-16042797) last December. He also must contend with the ripple effects of the eurozone drama and global economic slowdown, which together have contributed to a [20 percent decline](http://online.wsj.com/article/SB10001424052702303734204577467893480636270.html?mod=ITP_moneyandinvesting_3) in global oil prices over the past two months alone.

Against this backdrop, the ups and downs of relations with Washington may be little more than a distraction from the more urgent challenge of restoring the aura of invulnerability and bezal'ternativnost' (the lack of any alternative) that bolstered Putin's authority during his first 12 years in power. Already, he seems to have fallen back on the tried-and-true formula of portraying himself as the protector of a Fortress Russia beset by imaginary foreign enemies and spies.  This gambit has long helped the Kremlin cultivate support from average citizens and build up the regime's legitimacy.

The chief beneficiaries of Putin's rule -- the increasingly affluent and middle-class residents of places like Moscow -- show no signs of muffling their anger about his return to the Kremlin despite an ongoing crackdown on political dissent. Still, Putin knows how to cater to the two-thirds of the Russian electorate that voted for him in March and reside primarily in Russia's smaller cities and countryside. He may find it hard to resist the temptation to play upon their worst fears and anti-Western stereotypes. **Sacrificing the past several years of dramatic improvement in the U.S.-Russian relationship may seem like a small price to pay if it breathes new life and legitimacy into his rule.**

**Relations are impossible and won’t result in cooperation**

**LaFranchi, 3/3/12** [Christian Science Monitor, “A cold-war chill US-Russia relations falter over Libya and Syria”, http://www.csmonitor.com/USA/Foreign-Policy/2012/0303/A-cold-war-chill-US-Russia-relations-falter-over-Libya-and-Syria/%28page%29/2]

Secretary of State Hillary Rodham Clinton doffed her diplomatic gloves after Russia vetoed a United Nations Security Council resolution on Syria. Calling the February veto "despicable," she laid at Moscow's feet the "murders" of Syrian "women, children, [and] brave young men."

Not to be outdone, Russian Prime Minister Vladimir Putin railed against the United States for indulging its "bellicose itch" to get involved in other countries' internal affairs. And he vowed that Russia will thwart American designs in the Middle East.

Whatever happened to the "reset," President Obama's ballyhooed reorientation of US-Russia relations to a more cooperative path focused on common interests?

Russia would say Libya happened – the conflict where the West and the US in particular demonstrated a zeal for intervention that struck at Russia's sense of sovereignty and of what the UN should and shouldn't do. The US would say Syria happened – revealing Russia's revived obstructionist tendencies on the Security Council and demonstrating Russia's determination to protect an old ally at the expense of the Syrian people.

Both countries might say that what happened is this: The common interests that the "reset" was meant to emphasize – arms control, counterterrorism, the global economy – have taken a back seat to awakened geopolitical rivalries and **diverging** international **visions**.

Add to this the fact that Mr. Putin is expected to return to Russia's presidency in elections Sunday, bringing with him a blame-the-west perspective for explaining many of Russia's ills.

The result is that stormy days lie ahead for US-Russia relations, many say. Progress on issues like missile defense and NATO-Russia relations is likely to remain stalled – and could suffer serious setbacks if the Syria and Iran crises deteriorate further.

"I foresee a tough year for US-Russia relations," says Andrew Weiss, a former director for Russian affairs on the National Security Council under President Clinton who is now a Russia analyst at the RAND Corp. in Arlington, Va. With little prospect for advances, he adds, the Obama administration is likely to focus on preventing backsliding. "The emphasis will be on ensuring that these fast-moving conflicts don't put the remaining areas of cooperation at risk," he says.

Others say the current frictions demonstrate how relations, despite the efforts of three administrations, have never overcome cold-war mistrusts to progress to a deeper level.

"Under both Clinton and Bush, the US made it look like things were moving forward with Russia by focusing on things that were easier to do and that didn't require sacrifice from either side," says Paul Saunders, executive director of the Center for the National Interest in Washington.

Three years ago this month, President Obama said he **hoped to promote** more **cooperation** between the U.S. and Russia. It would be hard to see how that may happen as Vladimir Putin approaches power once again. Host Scott Simon speaks with the U.S. ambassador to Russia, Michael McFaul, about Sunday's elections in Russia.

#### Romney will win – independent voters will decide the outcome for him

**Ferrechio, 9/11**/12 – Chief Congressional Correspondent for the Washington Examiner (Susan, The Washington Examiner, “Polls show Romney soars with independent voters”, <http://washingtonexaminer.com/polls-show-romney-soars-with-independent-voters/article/2507679#.UFKaqo1mR9s>)

Recent polls show President Obama enjoying a bounce in the polls following last week's Democratic convention in Charlotte, N.C., but buried in those data is good news for Mitt Romney about voter enthusiasm and the preferences of independents, who could decide the election.¶ The CNN/ORC International poll of registered and likely voters released Tuesday shows likely voters favoring Obama by 52 percent to 46 percent over Romney -- evidence, pundits said, of a post-convention bump for the president.¶ But a figure buried in the report shows Romney leading Obama among likely independent voters, 54 percent to 40 percent.¶ Both Democrats and Republicans believe independents will be critical to deciding the outcome of the election, in part because they make up a growing part of the electorate and are considered up for grabs because they fluctuate in their political preferences from one election to the next.¶ "That's a significant lead," said pollster Ron Faucheux.¶ It was the independent vote that helped Obama win the 2008 election. He won 52 percent of independents, compared with 44 percent for McCain. Independents comprised about 33 percent of the overall vote in 2008.¶ "If Romney can beat Obama among independents this time, he can win the election."¶ A poll conducted two weeks ago by Democracy Corps showed Romney with a 15-point lead among independents, 53 percent to 38 percent.¶

#### Alt-causes – debates and labor statistics

**Lombardo, 9/12**/12 - Global CEO, StrategyOne (Steve, “Why This Election Comes Down to Two Days in October,” Huffington Post, <http://www.huffingtonpost.com/steve-lombardo/election-monitor-why-this_b_1877815.html>)

Several national polls released this week show that President Obama received a small but meaningful bounce after the conventions. The bounce -- in the 3-5 point range -- is within the median for convention bounces since 1964. The problem for Republicans is that Romney got no bounce from his convention. In fact, his vote share likely shrunk a point or two in the last two weeks. While the Republican convention may have strengthened Romney's position with the base, it did little to expand his coalition. The momentum from "You didn't build that" has been halted. ¶ However, we see nothing in the data yet to suggest this is anything but a dead heat. For all the hand wringing over the GOP convention and the Romney campaign they are in a dead heat with an incumbent President with 55 days to go. When you look at likely voters in key swing states, this thing is truly 50/50. ¶ Here is our take as of 12 a.m. EST: ¶ The murder of Ambassador Stevens and the unrest in Libya will thrust both candidates into the foreign policy fray. It will be very interesting to see how each handles the coming hours and days and how much the media -- and ultimately voters -- focuses on the issue.¶ Look for a higher level of advertising spend from the Romney campaign in key battleground states over the next two weeks. History has shown that the candidate who is clearly in the lead by mid to late September will likely be the winner in November. That doesn't mean things can't change in October -- they can. But sentiment will start to firm up in the next two weeks. The Romney campaign has a $60 million cash-on-hand advantage, and they should use it now. Team Obama defined Romney in the spring using their cash advantage; the Romney campaign should not wait until October. They need to change the dynamic before October 1.¶ The two biggest dates of the campaign are October 3rd and October 5th. The first debate will be held on Wednesday, October 3rd at the University of Denver at 9 p.m. EST. For three reasons this will be far and away the most important debate:¶ It is the first and therefore, unless there is a major blunder, is likely to be the one that sets the image of Romney in stone.¶ We really do not believe that the other two will matter if Romney has a poor debate performance here. Romney has to win this debate pure and simple.¶ This one is purely on domestic policy, i.e. the economy. If Romney can't win this one, he is unlikely to win the other two, barring a miscue by the President.¶ On October 5th at 8:30 a.m. EST the Bureau of Labor Statistics will release the September unemployment numbers. This will be the most impactful announcement of the campaign. If the unemployment rate goes up it could be devastating for the president's reelection chances. Similarly, if it goes down -- especially if it goes below 8 percent -- it may pretty much secure an Obama victory in November.

#### Gridlock inevitable – means no impact

**Curry, 9/11**/12 - NBC News national affairs writer (Tom, NBC Politics, “Romney election could create new scenario for EPA and coal,” <http://nbcpolitics.nbcnews.com/_news/2012/09/11/13807749-romney-election-could-create-new-scenario-for-epa-and-coal?lite>)

Whether Mitt Romney or Barack Obama wins the presidential election, a congressional impasse in 2013 seems likely. That’s because under most conceivable election scenarios – with Romney or Obama in the White House, and with either Democrats maintaining their Senate majority, or the Republicans taking it – the minority party could use the filibuster threat to block proposals it opposed.

#### Nuclear power doesn’t swing the election

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

#### Plan popular with public

Bowman, 4-18-12

[Karlyn, American Enterprise Institute, “Polls on the environment, energy, global warming and nuclear power,” http://www.aei.org/papers/politics-and-public-opinion/polls/polls-on-the-environment-energy-global-warming-and-nuclear-power-april-2012/]

\* President Obama is getting low marks on his handling of gas prices. In a February 2012 AP/GfK-Roper poll, 39 percent approved of the job he is doing in this area. Significant majorities say rising gas prices have caused difficulties in their households. \* The majority of Americans still think nuclear power is safe. In a March 2012 Gallup poll, 57 percent favored using nuclear energy as one way to provide electricity for the United States. But people still wouldn’t want to build a nuclear plant in their backyard. Only 35 percent told CBS pollsters in March 2011 that they would approve of a nuclear power plant in their community, and 62 percent disapproved. \* Americans like an “all-of-the-above” energy strategy that includes more energy production, developing alternative energy sources, more conservation and nuclear power.

#### Plan creates jobs in swing states like Ohio – popular

Korte, 4-27-12

[Gregory, USA Today, “Politics stands in the way of nuclear plant's future,” http://www.usatoday.com/money/industries/energy/story/2012-04-13/usec-centrifuges-loan-guarantees/54560118/1]

The stakes are high: It's an election year, and Ohio is a swing state. USEC estimates the project at its peak will generate 3,158 jobs in Ohio, and 4,284 elsewhere. Pike County, home to the centrifuges, has a 13% unemployment rate — the highest in Ohio. The median household income is about $40,000. The average job at USEC pays $77,316. Centrifuge parts are stacked up in Piketon. "It's as shovel-ready as they come," says spokeswoman Angela Duduit. Indeed, the project has enjoyed bipartisan support. A USA TODAY review of DOE records shows that no fewer than 46 members of Congress — 32 Republicans and 14 Democrats — have pressured the Obama administration to approve the loan guarantee for USEC. "Quick action is paramount," said one bipartisan letter. "It is imperative that this application move forward now," said another. The congressional support comes from states such as Ohio, Pennsylvania, Tennessee, Kentucky, West Virginia, Missouri, Alabama, Indiana, Maryland, North Carolina and South Carolina— an almost exact overlay of the states that would benefit from the 7,442 jobs the company says would be created.

**Ohio key**

**Sowinski 12** [Greg Sowinski, Lima News, “Senator tells Husky workers he’s got their backs”, Aug 15, 2012]

Brown said Ohio is key for President Barack Obama’s re-election.¶ “Ohio is still the most important state in this election,” he said.¶ But the biggest issue is the economy, he said.¶ “The economy always is,” he said. “We’re going in the right direction but we need to do better.”¶ Brown said the state has reduced unemployment from 10.5 percent to less than 7.5 percent under Obama, and the country has added 500,000 manufacturing jobs after losing 5 million of those jobs.