# \*\*\*\*1AC\*\*\*\*

## Plan text: The United States federal government should substantially increase loan guarantees for small modular thermal reactors.

# Contention One is Proliferation

## Nuclear power is increasing globally – demand ensures it’ll be large reactors

**Banks et al, Foreign Policy Energy Security Initiative nonresident fellow, 12-16**

(John P. “Nuclear Power in Developing Countries? Let's Talk about It.” 12-16. <http://www.brookings.edu/research/opinions/2012/12/16-nuclear-energy-banks-massy>. Accessed: 1/1/2013. ADC)

While the developed world gets cold feet …power, but commitments are pending.

## This will result in breakout proliferation-asymmetries undermine deterrence and ensure nuclear war-safeguards are key

**Sokolski, Nonproliferation Policy Education Center Executive Director, 09**

(Henry, June 1, 2009, “Avoiding a Nuclear Crowd”, http://www.hoover.org/publications/policy-review/article/5534, 10/3/12, atl)

Finally, several new nuclear … want. None of this, however, is inevitable.

## US construction is key to solve-SMR’s would out compete other models and a strong domestic industry ensures maintenance of the global gold standard.

**Miller, Bipartisan Policy Co-Chair for the Nuclear Initiative, 12**

(Dr. Warren F. “Pete” e-, Former DOE Assistant Secretary for Nuclear Energy, Senator Pete Domenici, July 2012, “Challenges and Opportunities Facing Nuclear Energy in the United States”, http://bipartisanpolicy.org/sites/default/files/Leadership%20in%20Nuclear%20Energy%20Markets.pdf, 8/14/12, atl)

Several other countries, by … and deployment (RD&D) programs.

## The plan causes other suppliers to model US practices-ensures no proliferation.

**Sokolski, Nonproliferation Policy Education Center Executive Director, 11**

(Henry, “The Post-Fukushima Arms Race?”, Foreign Policy, July, 29, 2011,http://www.foreignpolicy.com/articles/2011/07/29/the\_post\_fukushima\_arms\_race?print=yesandhidecomments=yesandpage=full, 10/9/12, atl)

A Japanese decision to resist temptation and … reluctantly in the past.

## Other countries follow the US lead-ensures they’ll pick SMR’s and implement safety measures

**Lieberman, American Physical Society senior government relations specialist, 11**

(Jodi, November 15, 2011 “Nonproliferation, Congress, and Nuclear Trade: Plus ça change, plus c’est la même chose” http://csis.org/files/publication/111116\_nonproliferation\_congress\_and\_nucleartrade.pdf)

U.S. Nonproliferation Influence While 123 agreements … will be held in South Korea in 2012.

## High risk of Asian prolif- US industry key to solve

**Ferguson, Federation of American Scientists President, 10**

(Charles, May 4, 2010, “Controlling Asia's Nuclear Power Tigers”, http://www.forbes.com/2010/05/04/asia-nuclear-power-markets-economy-national-security\_2.html, 9/3/12, atl)

Asia's nuclear power tigers are …proliferation-prone methods are not permitted.

## Proliferation causes nuclear war-crisis escalation, aggression, saving face, delegation and launch on warning guarantee it.

Kroenig, Georgetown University Government assistant professor, 12

(Matthew, Assistant Professor of Government at Georgetown University and Stanton Nuclear Security Fellow at Council on Foreign Relations, “The History of Proliferation Optimism: Does It Have A Future?,” 5-26-12, http://www.npolicy.org/article.php?aid=1182andrtid=2, accessed 10-2-12, mtf)

The proliferation optimist position, … opponents to back down.

## Status quo nuclear power will be based off Chinese designs-guarantees accidents and meltdowns

**Tu, Carnegie Energy and Climate Program senior associate, 12**

(Kevin Jianjun. “China’s Nuclear Crossroads.” 3-11. <http://carnegieendowment.org/2012/03/11/china-s-nuclear-crossroads>. Accessed: 9/30/2012. ADC)

It’s first important to acknowledge that the safety … that energy-thirsty China can’t afford to make.

## Nuclear accidents wreck biodiversity

Mousseau, USC biology professor, 2011

(TA, “Conservation consequences of Chernobyl and other nuclear accidents”, Biological Conservation Volume 144, Issue 12, December 2011, Pages 2787–2798, Science Direct, ldg)

The explosion at the Chernobyl nuclear … in species when they are rare.

**Extinction**

**Daily et al, Professor, Department of Biological Sciences Stanford, 7**

(11-19, Gretchen, Senior Fellow, Woods Institute for the Environment Director, Center for Conservation Biology Director, Interdisciplinary Program in Environment and Resources Chair, The Natural Capital Project, “ECOSYSTEM SERVICES: Benefits Supplied to Human Societies by Natural Ecosystems,” <http://www.sierraforestlegacy.org/Resources/Conservation/FireForestEcology/ForestEconomics/Economics-Daily97.pdf>) atw

In addition to the production of goods, **ecosystem …**beings trying to colonize the moon.

# Contention Two is Warming

**Newest and most rigorous studies conclude warming is anthropogenic – no alt causes**

**Muller, University of California-Berkeley physics professor, 12**

(Richard A., former MacArthur Foundation fellow, "The Conversion of a Climate-Change Skeptic," 7-28-12, http://www.nytimes.com/2012/07/30/opinion/the-conversion-of-a-climate-change-skeptic.html?pagewanted=all, accessed 8-10-12, mtf)

Call me a converted skeptic. Three years ago I … what can and should be done.

**Failure to solve warming causes extinction – geological history proves**

**Bushnell, NASA Langley Research Center chief scientist, 10**

(Dennis M. has a MS in mechanical engineering, won the Lawrence A. Sperry Award, AIAA Fluid and Plasma Dynamics Award, the AIAA Dryden Lectureship, and is the recipient of many NASA Medals for outstanding Scientific Achievement and Leadership, "Conquering Climate Change," The Futurist 44. 3, May/Jun 2010, ProQuest, accessed 10-3-12, mtf)

Unless we act, the next century could see …sound, they're actually conservative.

**Ocean acidification destroys marine biodiversity and leads to extinction**

**Romm, MIT Physics PhD, 10**

(Joe, Climate Progress editor, Senior Fellow at the American Progress, Acting Assistant Secretary of Energy for Energy Efficiency and Renewable Energy during the Clinton Administration, PhD in Physics from the Massachusetts Institute of Technology, "Nature Geoscience study: Oceans are acidifying 10 times faster today than 55 million years ago when a mass extinction of marine species occurred," 2-18-10, http://thinkprogress.org/climate/2010/02/18/205525/ocean-acidification-study-mass-extinction-of-marine-life-nature-geoscience/?mobile=nc#more-19529, accessed 10-3-12, mtf)

Marine life face some of the worst impacts. … **slashing carbon dioxide emissions is now**.

**Sea level rise causes extinction – even small rises matter**

**Sato, Daily Galaxy contributing editor, 8**

Rebecca, Contributing Editor at DailyGalaxy.com, former Head Writer at Freedom FastTrack “Can Changes in Sea Level Cause Periods of Mass Extinction?—A Galaxy Exclusive,” 6-19-08, http://www.dailygalaxy.com/my\_weblog/2008/06/changes-in-sea.html, accessed 10-3-12, mtf)

For years scientists have been trying to find … to induce. We, as a society, are not.”

**Other nations will model US investment – it’s a bellwether of nuclear tech**

**Adamantiades et al., ICG Aeolian Energy, 9**

(A. Adamantiades, ICG Properties is a real estate development firm; and I. Kessides, The World Bank, "Nuclear power for sustainable development: Current status and future prospects," Energy Policy Volume 37, Issue 12, December 2009, Science Direct, accessed 8-5-12, mtf)

This paper describes the current status and … **in other parts of the world**.

**Large-scale nuclear power transition solves warming – assumes resource and time restraints**

**Knapp et al., University of Zagreb professor, 10**

(Vladimir Knapp, Dubravko Pevec, and Mario Matijević, Faculty of Electrical Engineering and Computing, Department of Applied Physics, University of Zagreb in Croatia, "The potential of fission nuclear power in resolving global climate change under the constraints of nuclear fuel resources and once-through fuel cycles," Energy Policy Volume 38, Issue 11, November 2010, Science Direct, accessed 8-22-12, mtf)

In this study, we have investigated the … and for public acceptance of nuclear energy.

**Global commercialization key to check developing countries’ emissions**

**Kessides and Kuznetsov, World Bank chief economist, 12**

(Ioannis N., Development Research Group and The World Bank; and Vladimir, Consultant at The World Bank, "Small Modular Reactors for Enhancing Energy Security in Developing Countries," Sustainability 2012, 4.8, http://www.mdpi.com/2071-1050/4/8/1806/htm, accessed 9-29-12, mtf)

Increasing concerns related to …resistance, and reduced financial risk.

**Only the aff solves – alternative sources are of insufficient scope**

**Loudermilk, Institute for National Strategic Studies research associate, 11**

(Micah J., Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, contracted through ASE Inc., "Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs," IAGS Journal of Energy Security, May 2011 Issue, 5-31-11, http://www.ensec.org/index.php?option=com\_content&view=article&id=314:small-nuclear-reactors-and-us-energy-security-concepts-capabilities-and-costs&catid=116:content0411&Itemid=375, accessed 9-29-12, mtf)

Nuclear vs. Alternatives: a realistic picture When discussing … of the nation’s nuclear energy portfolio.

**No risk of link turns – complete nuclear power chain significantly reduces CO2 emissions**

**Adamantiades et al., ICG Aeolian Energy, 9**

(A. Adamantiades, ICG Properties is a real estate development firm; and I. Kessides, The World Bank, "Nuclear power for sustainable development: Current status and future prospects," Energy Policy Volume 37, Issue 12, December 2009, Science Direct, accessed 8-5-12, mtf)

2.3. Global climate change In 1990 a major …environmental effects of fossil fuel pollutants.

# Contention Three is Solvency

## Capitalization is key to nuclear commercialization-only the federal government can leverage the funds necessary

Bennett, Vice President for Public Affairs, Third Way, 10

(Matt, Josh Freed is Director of the Third Way Clean Energy initiative, Jeremy Ershow is a Policy Advisor at Third Way, “Breaking the Nuclear Financing Barrier,” February 10, http://content.thirdway.org/publications/265/Third\_Way\_Idea\_Brief\_-\_Breaking\_the\_Nuclear\_Financing\_Barrier.pdf, accessed 9-30-12, ara)

High financing costs stand in the way of … request to triple the loan volume.

## SMR’s can be commercialized quickly and are safe-studies prove they have multiple advantages

Kessides and Kuznetsov, World Bank chief economist, 12

(Ioannis N., Development Research Group and The World Bank; and Vladimir, Consultant at The World Bank, "Small Modular Reactors for Enhancing Energy Security in Developing Countries," Sustainability 2012, 4.8, http://www.mdpi.com/2071-1050/4/8/1806/htm, accessed 9-29-12, mtf)

SMRs offer a number of … by significant economies of scale [19].

## NRC will streamline SMR’s

Sullivan, et al., partner, Hogan Lovells’ LLP, 10

(Mary Anne, partner in Hogan Lovells' energy practice in Washington, D.C., Daniel F. Stenger is a partner in Hogan Lovells' energy practice, Amy C. Roma is a senior associate in Hogan Lovells' energy practice, “Are Small Reactors the Next Big Thing in Nuclear?” 12-21-10, <http://www.elp.com/index/display/article-display/3288852302/articles/electric-light-power/volume-88/issue-6/sections/are-small-reactors-the-next-big-thing-in-nuclear.html>, accessed 9-20-12, ara)

The biggest challenge to getting … initiative through industry working groups.

## SMR’s compete with gas-better risk premium and no volatility

**Rosner, Distinguished Service Professor, Departments of Astronomy and Astrophysics, and Physics – Chicago University, 11**

(Robert e-, Senior Fellow, Computation Institute; Director, Energy Policy Institute; Enrico Fermi Institute; Harris School of Public Policy, Stephen Goldberg, Special Assistant to the Director Argonne National Laboratory, “Small Modular Reactors – Key To Future Nuclear Power Generation In The U.S.”, Energy Policy Institute at Chicago The Harris School of Public Policy Studies, 6/2/12, atl)

In both the 2004 Chicago Study and the current …for nuclear power plants.

## We have the workforce and infrastructure

**Spencer et al, Thomas A. Roe Institute for Economic Policy Studies research fellow, 11**

(Jack. “A Big Future for Small Nuclear Reactors?” Heritage Foundation. 2-02. <http://www.heritage.org/research/reports/2011/02/a-big-future-for-small-nuclear-reactors>. Accessed: 9/7/2012. ADC)

Domestic Production. Although the …—all in the United States.

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# Solvency

## No shortage–most qualified ev

NEI, 12

(Nuclear Energy Institute, "Myths & Facts," June 2012, http://www.nei.org/resourcesandstats/documentlibrary/reliableandaffordableenergy/factsheet/myths--facts-about-nuclear-energy-january-2012/, accessed 9-29-12, mtf)

Fact: Readily available … the expansion of nuclear energy in the U.S. in its 2010 study “The Future of the Nuclear Fuel Cycle.”

## Japan Supply solves REM

ProEdge Wire, 9-19-12

(“The Sino-Japanese Dispute over the Senkaku Islands Highlights the Beginning of the end of China’s Rare Earths Monopoly”, Accessed 9-22-12, <http://proedgewire.com/rare-earth-intel/the-sino-japanese-dispute-over-the-senkaku-islands-highlights-the-beginning-of-the-end-of-chinas-rare-earths-monopoly/>) NJR

As for Japan itself, a new underwater … shooting itself in the foot this time.

## Loan guarantees are low risk – modeled on successful techniques and ensures revenue

**Bowman, NEI president, 06**

(Frank L., Nuclear Energy Institute CEO. “U.S. House of Representatives Committee on Appropriations Subcommittee on Energy and Water Development.” 9-13. <http://www.nei.org/publicpolicy/congressionaltestimony/bowmantestimony91306extended>. Accessed: 10/02/2012. ADC)

It is important to note that the loan guarantee… form of investment banking fees.

# EP K

## Perm do both

## Solving for developing countries solves for the K- that’s the warrant o their link ev

## We have to combine a political focus with sound scientific advocacy-it is the only way to solve environmental crisis

**Throgmorton, University of Iowa Associate Professor of Urban and Regional Planning, 89**

(James, January 1, 1989, “Synthesizing Politics, Rationality, and Advocacy: Energy Policy Analysis for Minority Groups”, Policy Studies Review, 8 (Winter 1989), pp. 300-321, 9/28/12, atl)

Primers suggest that good analysts should apply … of the case about to be described.

## Epistemological debate is irrelevant - concrete action is inevitable - they fail to create useful knowledge

**Friedrichs, Oxford politics lecturer, 2009**

(Jorg, “From positivist pretense to pragmatic practice: Varieties of pragmatic methodology in IR scholarship. International Studies Review 11(3): 645–648, ldg)

As Friedrich Nietzsche ([1887] 1994:1; cf. Wilson … are two sides of the same coin

## Epistemology arguments are wrong-structures pre-exist and are knowable

**Fluck, Aberystwyth International Poltiics PhD, 2010**

(Matthew, “Truth, Values and the Value of Truth in Critical International Relations Theory”, Millennium Journal of International Studies, 39.2, SAGE, ldg)

Critical Realists arrive at their understanding …about social reality.

## Science is the best method through which we can know the world – community re-testing ensures science is self-correcting, accurate and unbiased

**Wolfs, University of Rochester Department of Physics and Astronomy, 01**

(Frank, “Introduction to the Scientific Method”, http://teacher.nsrl.rochester.edu/phy\_labs/appendixe/appendixe.html, 9/14/12, atl)

The scientific method is the process by … of scientific practice may be found in the references listed below.

# CP

## Perm do both

## Military use of nuclear fails- too expensive, has to be backed up, less convenient

**Lovins, RMI founder, 12**

(Armory B., Rocky Mountain Institute, “Lovins addresses New Nuclear Power for DOD (Q&A 3 of 3),” 5-10-12, da 9-15-12, <http://dodenergy.blogspot.com/2010/05/lovins-addresses-new-nuclear-power-for_12.html>, mee)

Question 3: Are there any points in particular you'd … technologies already rejected by the marketplace.

## DOD implementation fails- cost overruns, delays, lack of accountability

**Carper, Senator, 12**

(Thomas R. D-DE, “Department of Defense Inspector General Details Problem with New Billion Dollar Accounting Systems;  Schedule Slippages and Cost-Overruns Continue;  Sen. [Thomas R. Carper](http://www.lexisnexis.com/lnacui2api/search/XMLCrossLinkSearch.do?bct=A&risb=21_T15531772237&returnToId=20_T15531780296&csi=247474&A=0.9938243401496382&sourceCSI=9369&indexTerm=%23PE0009XOR%23&searchTerm=Thomas%20R.%20Carper%20&indexType=P)(D-DE) News Release,” 7-14-12, Congressional Documents and Publications, accessed l/n 9-15-12, mee)

Today, Sen. [Tom Carper](http://www.lexisnexis.com/lnacui2api/search/XMLCrossLinkSearch.do?bct=A&risb=21_T15531772237&returnToId=20_T15531780296&csi=247474&A=0.9938243401496382&sourceCSI=9369&indexTerm=%23PE0009XOR%23&searchTerm=Tom%20Carper%20&indexType=P)(D-Del.), Chairman … and abuse, among other needs.

# Politics

## In spite of areas of tension relations with India are high now and will continue to improve throughout Obama's 2nd term

Desai, Truman National Security Project fellow, 12

(Ronak, November 15, 2012, <http://www.huffingtonpost.com/ronak-d-desai/usindia-relations-under-t_b_2115396.html>, accessed 1/19/2013) mph

What's ahead for US-India relations now that … ties had been oversold have been misguided.

Won’t pass – empirics prove, no GOP incentive, and not enough support

Zornick, The Nation Staff Writer, 1-29-13

(George, “[The Numbers Just Don’t Add Up on Immigration Reform](http://www.thenation.com/blog/172504/numbers-just-dont-add-immigration-reform),” [http://www.thenation.com/blog/172504/numbers-just-dont-add-immigration-reform#](http://www.thenation.com/blog/172504/numbers-just-dont-add-immigration-reform), d/a 1-31-13, ads)

Inside Washington on Monday, the realest talk … they are responding rationally.

## Economic woes thump the disad

Associated Press, 2-1

("THURSDAY, JANUARY 31, 2013," Obama guns and immigration agenda finds itself competing with economic contraction, 2-1-13, http://www.the-news-leader.com/ap%20general%20news/2013/02/01/thursday-january-31-2013, accessed 2-1-13, mtf)

Just as President Barack Obama is pushing new i… December, erased consumer confidence that had built up in 2012.

## Nuclear power is massively popular- politicians get on board

Whitman, CASEnergy Co-Chair, 12

(Christine Todd, Former EPA Administrator and New Jersey Governor, "Nuclear Power Garners Bipartisan Support," 8-13-12, http://energy.nationaljournal.com/2012/08/finding-the-sweet-spot-biparti.php#2237728, accessed 9-30-12, mtf)

The energy policy that I’ve seen garner...of the aisle can support.

**Winners win- plan is key to Obama political power**

**Creamer, political organizer and strategist for four decades, 1-2**

(Robert, he and his firm, Democracy Partners, work with many of the country’s most significant issue campaigns, one of the major architects and organizers of the successful campaign to defeat the privatization of Social Security, he has been a consultant to the campaigns to end the war in Iraq, pass universal health care, pass Wall Street reform, change America’s budget priorities and enact comprehensive immigration reform, he has also worked on hundreds of electoral campaigns at the local, state and national level, "Why GOP Collapse on the Payroll Tax Could be a Turning Point Moment," www.huffingtonpost.com/robert-creamer/why-gop-collapse-on-the-p\_b\_1167491.html, accessed 1-2-12, mss)

**Strength and victory are** **enormous …** -when you have them on the run - that's the time to chase them.

# Prices DA

## Nuclear provides cheap electricity

Tverberg, Oil Drum editor, 2012

(Gail, “The Modern World of Nuclear Generated Electricity”, 8-16, <http://oilprice.com/Alternative-Energy/Nuclear-Power/The-Modern-World-of-Nuclear-Generated-Electricity.html>, DOA: 11-7-12, ldg)

Nuclear Electric Plants that are “Paid for” …commercial users (since they usually get the best rates).

## Electricity prices increasing now

Fahey, Associated Press, 2012

(Jonathan, “Electricity Prices Rise Despite Cheaper Costs For Utility Companies”, 7-11,[http://www.huffingtonpost.com/2012/07/11/electric-prices-rise-despite-cheap-production\_n\_1665946.html](http://www.huffingtonpost.com/2012/07/11/electric-prices-rise-despite-cheap-production_n_1665946.html" \t "_blank), DOA: 11-7-12, ldg)

A plunge in the price of natural gas has made it … prices are expected to rise 2 percent.

## History disproves causality between crisis and war

Ferguson, Harvard University Laurence A. Tisch Professor of History, 2006

(Niall, Senior Research Fellow of Jesus College at Oxford, Senior Fellow of the Hoover Institution, “The War of the World”, <http://www.telegraph.co.uk/culture/3652352/The-war-of-the-world.html>, DOA: 10-22-12, ads)

Nor can economic crises explain all the … with relatively high growth and low inflation.

# Coal DA

## Natural gas spurs shift from coal and increase US exports

ESI-Africa, 9-18

("New coal data reveals an industry in flux," 9-18-12, http://www.esi-africa.com/node/15381, accessed 9-22-12, mtf)

The search for new coal markets has …, or leave their mines idling indefinitely.

## Natural gas prices and overregulation causing US shift from coal

Loris, Heritage Economic Studies fellow, 12

(Nicolas D. Loris is Herbert and Joyce Morgan Fellow in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation, "War on Coal: A House Bill to Stop the Regulatory Assault," Heritage Foundation, 9-19-12, http://www.heritage.org/research/reports/2012/09/war-on-coal-a-house-bill-to-stop-the-regulatory-assault, accessed 9-22-12, mtf)

Coal’s share of electricity … are harmed by their policies.

# \*\*\*\*1AR\*\*\*\*

# Prolif

## IEAE fails—lack of resources, institutional support, or enforcement mechanisms

**Council on Foreign Relations, 12**

(July 5, 2012, “The Global Nuclear Nonproliferation Regime”, http://www.cfr.org/proliferation/global-nuclear-nonproliferation-regime/p18984, 10/19/12, atl)

NNWS are subject to safeguards to ensure that …. efforts to make the additional protocols mandatory.

# Poltiics

## No bill for months and CIR empirically fails to solve

**Zuckerman, Heritage Foundation Research Associate, 1/30**

(Jessica, January 30, 2013, “Senate Immigration Reform: Another Misguided Call for Comprehensive Legislation”, http://www.heritage.org/research/reports/2013/01/obamas-immigration-reform-another-misguided-call-for-comprehensive-legislation, 1/31/13, atl)

On Monday, a group of Senators know in the media as … to produce the same results.

## No PC loss from nuclear energy

**Hinckley, Georgetown University Energy Policy professor, 11**

(Elias, partner with the law firm of Kilpatrick Townsend & Stockton. “Hard Choices Ahead for US Energy Policy.” June 2011. <http://www.ourenergypolicy.org/wp-content/uploads/2012/03/EHinckley-policy-article.pdf>. Accessed: 10/02/2012. ADC)

What remains unclear is how policymakers w…being developed over the near or midterm.

## Opponents are disorganized- nuclear industry empirically controls the messaging battle

Squassoni, CSIS Senior Fellow, 12

(Sharon, Director and Senior Fellow, Proliferation Prevention Program at Center for Strategic and International Studies, former senior assoc. at Nuclear Nonproliferation Program at Carnegie, former Congressional adviser as senior specialist in weapons of mass destruction at the Congressional Research Service, “Nuclear Power in the Global Energy Portfolio” in the report: The Future of Nuclear Power in the United States, Federation of American Scientists, February 2012, http://www.fas.org/pubs/\_docs/Nuclear\_Energy\_Report-lowres.pdf, accessed 9-30-12, mtf)

Concerns about contamination of the … poll conducted about a week after Fukushima.18