# \*\*\*\*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 on nuclear … of others are seriously considering nuclear power, but commitments are pending.

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

(Fast/breakout, checks US influence, miscalc risk (small difference/opaqueness)

**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 weapons … 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 contrast, have … development, 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 … has 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 … summit will be held in South Korea in 2012.

## 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… less-resolved 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 … 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 power … 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, **…**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 … about 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. We … **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 … 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 … **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 …strategies 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 energy … 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 …expansion 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 … the 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 … budget 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 advantages that … characterized 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 SMRs … 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 nuclear i… capabilities—all in the United States.

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# Warming

## No uranium 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 uranium … in its 2010 study “The Future of the Nuclear Fuel Cycle.”

## It’s not too late

**Nuccitelli, UC Davis physics MA, 8-31-12**

(Dana, “Realistically What Might the Future Climate Look Like?”, <http://www.skepticalscience.com/realistically-what-might-future-climate-look-like.html>, DOA: 11-3-12, ldg)

We're not yet committed to … as soon and as much as possible.

# Prolif

## IAEA underfunded now

**Reuters, 12**

(August 13, 2012, “IAEA cash gap may hinder nuke role, report says”, http://www.jpost.com/IranianThreat/News/Article.aspx?id=273708, 10/19/12, atl)

The United Nations' nuclear agency is … - comes from Western member states on a voluntary basis.

# States

## Perm do both

## Perm shields the link-allows blame shifting

**Wells, Missouri law professor, 2007**

(Christina, “Katrina and the Rhetoric of Federalism”, Mississippi law review, lexis, ldg)

Cooperative federalism (along with … federalism program

## Signal of continuous stable support is key

**NEI 2008**

(Nuclear Energy Institute, “Building Confidence in Licensing New U.S. Nuclear Plants,” Jan/Feb, <http://nei.org/resourcesandstats/publicationsandmedia/newslettersandreports/nuclearpolicyoutlook/>, DOA: 11-2-12, ldg)

Addressing Investors’ Concerns Maintaining …expansion of the U.S. nuclear power sector.

## States can’t provide that – they’re broke

**The Hill 2012**

(“Report: Medicaid costs squeezing state budgets” 6-12, <http://thehill.com/blogs/healthwatch/medicaid/232283-report-medicaid-costs-squeezing-state-budgets%20->, DOA: 11-2-12)

The poor economy and rising … Pattison, the group's executive director.

## Causes court strike-down – broad federal presumption exists for nuclear issues

Eggen, Widener University School of Law professor, 6

(Jean Macchiaroli, Professor of Law at Widener University School of Law, “ARTICLE: The Normalization of Product Preemption Doctrine,” Alabama Law Review, Spring 2006, 57 Ala. L. Rev. 725, lexis, accessed 10-5-12, mtf)

A. The Doctrinal Context The preemption … recourse for those injured by illegal conduct.

## Threat alone creates a chilling effect that deters innovation

Liu, Columbia Law School JD, 9

(Chang Derek Liu, JD – Columbia Law School, “NOTE: The Blank Page Before You: Should The Preemption Doctrine Apply To Unwritten Practices?,” Columbia Law Review, March 2009, 109 Colum. L. Rev. 350, lexis, accessed 10-5-12, mtf)

1. Stifling State Innovation. - From a federalism … into discretionary decisions proves troublesome.

## Using DOE is key international perception and cooperation

**APS 2001**

(American Physical Society, “Revitalizing Science In the Department of Energy”, <http://www.aps.org/policy/tools/coalitions/esc/upload/Grassroots_2001_ESC_WhitePaperRevitalizingScienceDOE.pdf>, DOA: 11-2-12, ldg)

Most DOE scientific user facilities – large and … Science keep pace with the investment commitments of NIH and NSF.

# Warming CP

## Perm do both

## US failure to lead causes Chinese leadership

**Cullinane, Oversight & Investigations Subcommittee of the House Foreign Affairs Committee staff associate, 11**

(Scott. “America Falling Behind: The Strategic Dimensions of Chinese Commercial Nuclear Energy.” Journal of Energy Security. 9-28. <http://www.ensec.org/index.php?option=com_content&view=article&id=319:america-falling-behind-the-strategic-dimensions-of-chinese-commercial-nuclear-energy&catid=118:content&Itemid=376>. Accessed: 9/30/2012. ADC)

The international trade of nuclear … Pacific to shape the 21st century.

## China’s rise will encourage aggression and miscalculation-robust capabilities are key to check.

**Friedberg, Princeton International Affairs professor, 2011**

(Aaron, “China's Challenge at Sea”, 9-4, [www.nytimes.com/2011/09/05/opinion/chinas-challenge-at-sea.html?\_r=0](http://www.nytimes.com/2011/09/05/opinion/chinas-challenge-at-sea.html?_r=0), DOA 11-4-12, ldg)

Unfortunately, those constraints are being … the entire burden of preserving the Asian power balance, but it must lead.

# Ptix

## 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 … relatively high growth and low inflation.

## Won’t pass – just a ploy to garner Latino support

Munro, Daily Caller White House Correspondent, 12-31-12

(Neil, “Obama promises new immigration plan but keeps endgame close to his vest,” <http://dailycaller.com/2012/12/31/obama-promises-new-immigration-plan-but-keeps-endgame-close-to-his-vest/>, d/a 1-2-13, ads)

President Barack Obama promised … vote in 2004, during the housing boom.

## No new legislation – sequestration and debt ceiling fights

Huffington Post, 1-2-13

(“Obama's Immigration Reform Push To Begin This Month,” <http://www.huffingtonpost.com/2013/01/02/obama-immigration-reform_n_2398507.html>, d/a 1-2-13, ads)

The timeframe is likely to be cheered…legislation would seem diminished.

## Obama won’t push immigration – multiple other priorities

Munro, Daily Caller White House Correspondent, 12-31-12

(Neil, “Obama promises new immigration plan but keeps endgame close to his vest,” <http://dailycaller.com/2012/12/31/obama-promises-new-immigration-plan-but-keeps-endgame-close-to-his-vest/>, d/a 1-2-13, ads)

However, Obama’s language suggested that … “rebuilding our infrastructure, which is broken.”

## 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 … sides of the aisle can support.

# Russia DA

## No link—nuclear baseload power generation is distinct from natural gas peak generation

**CEEG, 06**

(Consumer Energy Education Group, “Managing Your Energy Costs”, http://manageenergycosts.com/ManagingCosts.html, 10/10/12, atl)

Electricity and Peak Demand

Since electricity cannot be effectively … then, you don’t run it that often).

## Alt causes to Russia economy, impact is denied and they are diversifying.

**Kopinski, Chief Investment Officer Global and Non-U.S. Equity, 2011**

(Mark, “Russia’s Push for economic Diversification and Modernization”, January, <https://www.americancentury.com/pdf/CIO_Insights_Kopinski.pdf>, ldg)

Russia is contending with a host of issues… sector in the world behind China.

# Halfnium DA

## Demand increasing—multiple trends and nuclear renaissance

**Vulcan, Seeking Alpha, 11**

(Tom, March 1, 2011, “Hafnium: Small Supply, Big Applications” http://seekingalpha.com/article/255689-hafnium-small-supply-big-applications, 10/20/12, atl)

While the demand for hafnium … work that is always being undertaken.

## World expansion now triggers the link- that’s Banks

## Heg doesn’t deter conflict – empirics prove

Fettweis, 11

(Christopher, professor of political science and international relations at Tulane University, "Free Riding or Restraint? Examining the Grand Strategy of Europe and Japan", Paper presented at the annual meeting of the International Studies Association Annual Conference "Global Governance: Political Authority in Transition", <http://citation.allacademic.com/meta/p_mla_apa_research_citation/5/0/1/3/8/p501387_index.html>, accessed 1-5-12, AT)

The limited empirical evidence we have … think otherwise base their view on faith alone.

## US can’t project power now

**Parent et al., Miamia political science professor, 2011**

(Joseph, “The Wisdom of Retrenchment”, Foreign Affairs, Nov/Dec, ebsco, ldg)

The trend of the last decade is … and the United States is leaking cash.

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

# Russia DA

## Russia economy collapsing now-multiple factors overwhelm any effect of the plan

Alexandrova, ITAR-TASS, 11-7-12

(Lyudmila, “Russian economy already in crisis”, <http://indrus.in/articles/2012/11/06/russian_economy_already_in_crisis_18885.html>, DOA: 11-7-12, ldg)

The latest developments in the Russian … powerful impetus to internal demand.”