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

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

# 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 … considering nuclear 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 weapons …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 contrast, … 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 adopt … in time, as it 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 agreements … summit 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 becoming more … 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, while … 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 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 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, **…**, human 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 … 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 … forecasts 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 now …**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 … of sea level rise that we are likely 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 future … **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 potential …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 supply s… proliferation 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 … and 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 … 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 … 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…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 … quality 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 … capabilities—all in the United States.

# \*\*\*\*2AC\*\*\*\*

# T

## 1. We meet – their ev says loans

## 2. Counter-interp – loan guarantees for nuclear are topical

Webb, University of Ottawa Law Lecturer, 93

(Kernaghan, Consumer Affairs Bureau of Canada, "Thumbs, Fingers, and Pushing on String: Legal Accountability in the Use of Federal Financial Incentives," Alberta Law Review, Vol. 31, Issue 3 (31 Alta. L. Rev. 501, 1993), p. 505-506, Hein Online, accessed 8-1-12, mtf)

In this paper, "financial incentives" …, but they are not incentives.

## We meet counter-interp – plan directly incentivizes the creation of nuclear power plants through loan guarantees

## C. Standards

## 1. No ground loss – loan guarantees spend money and link to spending, neg gets all nuclear specific answers and advantage answers and DAs, and mech answers to LGs

## 2. Aff flex – neg gets block, conditionality, and policy and critical advocacies – aff flexibility for mechanism key to check neg advantages

## 3. Reasonability- competing interps is a race to the bottom

## 4. Their interp is bad- nuclear affs are the core of the topic and LGs are the biggest mech

## D. Potential abuse is not a voter

# Solvency

## SMRs are competitive – cheaper and more flexible than large nuclear AND government support is key

Vujić, Professor, Nuclear Engineering, UC Berkeley, 12

(Jasmina, Ph.D. in Nuclear Science, University of Michigan, 1990, Ryan M. Bergmann, Radek Škoda, , Marija Miletić, “Small modular reactors: Simpler, safer, cheaper?” September 2012, <http://www.sciencedirect.com/science/article/pii/S036054421200093X>, accessed 9-19-12, ara)

In order to evaluate the attractiveness …it may be the only option since their electric grids cannot take 1000 + MWe single units [9].

# W

## 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 … and as much as possible.

# P

## And, domino theory is true—empirics prove

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)

Further proliferation. Nuclear proliferation poses … America’s alliance relationships, giving us all good reason to fear the spread of nuclear weapons.

# Security K

## Reps don’t come first and don’t cause violence

**Rodwell, Manchester Metropolitan University PhD candidate, 2005**

(Jonathan, “Trendy But Empty: A Response to Richard Jackson”, <http://www.49thparallel.bham.ac.uk/back/issue15/rodwell1.htm>, DOA: 11-8-12, ldg)

In this response I wish to argue that the Post-… and a heuristic model.

## No risk of “endless warfare”- we should embrace pragmatism in security

**Gray, Reading University IR professor, 2007**

(Colin, “The Implications of Preemptive and Preventive War Doctrines: A Reconsideration”, July, <http://www.ciaonet.org/wps/ssi10561/ssi10561.pdf>, DOA: 11-3-12, ldg)

7. A policy that favors preventive warfare … policy, **must be nothing if not pragmatic**.

## The causality of their impact is awful- contextual influences outweigh the speech act

**Ghughunishvili, CEU IR masters, 2010**

(Irina, “Securitization of Migration in the United States after 9/11: Constructing Muslims and Arabs as Enemies”, online pdf, ldg)

As provided by the Copenhagen … can relate to their speeches.

## The alt leads to total war

**Moreiras, Duke European studies director, 2004**

(Alberto, “A God without Sovereignty. Political Jouissance. The Passive Decision”, CR: The New Centennial Review 4.3, project muse, ldg)

But the scandal gets worse, and this is something that … the line. Total war is an absolute threat.

# Renewables CP

## Perm do both

## No viable storage dooms renewables

Maryniak, Singularity University Energy and Environmental Systems Track chairman, 2012

(Gregg, “Storage, Not Generation, Is the Challenge to Renewable Energy”, 7-25,[http://www.huffingtonpost.com/x-prize-foundation/storage-not-generation-is\_b\_1703087.html](http://www.huffingtonpost.com/x-prize-foundation/storage-not-generation-is_b_1703087.html%22%20%5Ct%20%22_blank), DOA: 11-7-12, ldg)

Some of my colleagues have observed the significant … energy storage system: it must be cheap.

## Renewables can’t solve, tradeoff is with fossil fuels, and SMRs solves the impacts

Loudermilk, Energy & Environmental Security Policy Research Associate, National Defense University, 11

(Micah, Master degree in International Relations from the University of Akron, “Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs,” 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, published by the *Journal of Energy Security*, accessed 8-12-12, ara)

When discussing the energy security …of the nation’s nuclear energy portfolio.

**Ethical policymaking must be grounded in consequences**

**Isaac, political science professor Indiana University, 2002**

(Jeffrey, “Ends, Means, and Politics, Dissent Magazine, Spring 2002, ldg)

Power is not a dirty word or an unfortunate feature of the … And it undermines political effectiveness.

# Leadership DA

## Eurozone recession will continue – countries falling short of expectations

**Ewing, NYT staff writer, 2/14**

(Jack. “Economy in Europe Contracts More Than Expected.” 2013. <http://www.nytimes.com/2013/02/15/business/global/daily-euro-zone-watch.html?_r=0>. Accessed: 2/21/2013. ADC)

 European economies shrank in … improve the country’s economic performance.

## Massive nuclear incentives just passed – non-unique’s perception link

**Yurman, ANS Nuclear Café, 2012**

(Dan, “Nuclear energy R&D budgets spared major cuts”, 1-5, lexis, ldg)

A Congress that has public approval ratings in the … energy programs. Nuclear … include some fast reactor work scope.

## Heg decreases interventionism

**Kagan et al., former Carnegie senior associate, 2002**

(Robert, “Present Dangers: Crisis and Opportunity in American Foreign and Defense Policy” <http://www.wnyc.org/books/16811>, DOA: 11-3-12, ldg)

This does not mean that the … challenge before it rouses itself into action.

## Politicians will cling to hegemony no matter what

**Calleo, SAIS European Studies professor, 2010**

(David, “American Decline Revisited,” Survival, 52:4, 215 – 227, ebsco, ldg)

The history of the past two decades suggests … instrument that threatens the world with inflation.

## And even if rise of rest is inev we make it stable

**Walton, Reading IR lecturer, 2007**

(Dale, “geopolitics and the great powers in the twenty-first century”, <http://books.google.com/books?id=AQLTD1R-47AC&printsec=frontcover&source=gbs_navlinks_s#v=onepage&q=&f=false>, DOA: 11-4-12, ldg)

Although international political conditions…the probability of a great power war.

## Decreasing hegemony doesn’t reduce opponent aggression.

Feaver, professor of political science at Duke University, 2003

(Peter, “Armed servants: agency, oversight, and civil-military relations”, pg 4-5, ldg)

The civil military problematique is so vexing … to rash behavior and then failing in the ultimate military contest.

# Prices DA

## Electricity set to rise

EIA 11-6-12

(Energy Information Administration, “U.S. Electricity Consumption”, <http://www.eia.gov/forecasts/steo/report/electricity.cfm>, DOA: 11-7-12, ldg)

EIA expects the nominal U.S. … cents per kilowatthour.

## 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” … users (since they usually get the best rates).

## Way cheaper then coal and renewables

Cojuangco, former congressman, 2012

(Mark, “Is electricity generated from nuclear energy going to be cheaper?”, 5-31,<http://kuryentenukleyar.com/advantages/2-2/>, DOA: 11-7-12, ldg)

Is electricity generated from nuclear … bill by about 4x for wind or 7x for solar.

## 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.

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

# Prices

## Nuclear power is competitive-empirics

Brook, energy collective, 2012

(Barry, “How much does nuclear power actually cost?”, 8-16, <http://theenergycollective.com/barrybrook/103871/talking-turkey-nuclear-costs>, DOA: 11-7-12, ldg)

If we look beyond the infamous Finnish example to some of …izes. All of this brings cost down.

## No diversionary wars – prefer our evidence

Fravel, MIT Political Science Associate Professor, 2010

(M. Taylor, “The Limits of Diversion: Rethinking Internal and External Conflict,” Security Studies, 19:2, 307 – 341, DOA: 10-22-12, ads)

Yet despite two decades of renewed research, … internal threats to their political survival.