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Nuclear Energy Renaissance: Global Supply Chain Critical

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After years of policy wrangling and bureaucratic delays, the Department of Energy (DOE) has identified the four companies approved to receive federally backed loan guarantees to help finance the construction of new nuclear reactors in the U.S. All of the recipients have one thing in common: strong international connections. With protectionist sentiment on the rise, the DOE should be commended for recognizing the critical role that the global nuclear industrial base must play in reestablishing the U.S. nuclear industry.

Access to Global Supply Chains Critical to U.S. Nuclear Renaissance. America's first orders for nuclear power plants will depend on global supply chains and free trade. Any tariff or regulatory barriers to trade in nuclear components drive up the costs associated with building new reactors. Given the already high capital costs inherent to nuclear power, protectionism could inflate the cost of new projects enough to stop the nuclear renaissance before it begins.

Thus, ensuring access to global goods and services is critical to reinvigorating nuclear energy in the U.S. and the domestic nuclear industrial base. The U.S. currently lacks the industrial capacity to support a substantial expansion of domestic nuclear power; however, as new orders for reactors increase, incentives for investors to rebuild production facilities in the U.S. will rise. New U.S. and world demand for nuclear components will give a healthy boost to the financial outlook for the industry, attracting the significant investments necessary to

expand international capacity and provide the impetus to start rebuilding America's commercial nuclear industrial capacity.

Rebuilding America's Nuclear Industrial Base. While the U.S. commercial reactor business faded decades ago, the U.S. did not abandon the nuclear sector altogether. Instead of building new plants, the U.S. commercial nuclear industry turned to making its existing plants run more efficiently and safer. So while other countries may lead in new plant construction, America excels in operating them.

Moreover, the United States remains a leader in researching and developing nuclear technologies. America's vast national laboratory system and private sector expertise provides the resources and a scientific foundation for the U.S. to again compete as a global leader in the commercial nuclear world.

Moreover, while building commercial reactors in the U.S. stopped, building reactors altogether did not. As commercial construction waned, the nuclear components industry consolidated to meet government demand for nuclear aircraft carriers and submarines, as well as other federal requirements. These companies are now reengaging in the commercial nuclear business and will likely be at

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the forefront of a resurgent U.S. nuclear components industry.

Securing U.S. Access to International Markets. The U.S. should keep the momentum moving behind the growth of a strong and efficient U.S. nuclear industry. America's policymakers should keep U.S. markets open and encourage lower trade barriers around the world. The DOE should be commended for recognizing the important contribution that foreign companies will make in expanding nuclear power in the U.S. Going forward, the Obama Administration should:

- *Reject protectionist measures that restrict access to the global supply chain.* Trade measures including tariffs, quotas, domestic preferences in procurement, and excessive regulation increase costs, limit access to critical expertise, and undermine the broad expansion of nuclear power in the U.S.
- *Work to dismantle trade and investment barriers protecting commercial nuclear industries in foreign markets.* Much of the world's industry is dominated by state-run—and state-subsidized—firms, and trade restrictions are used to protect those firms as a general rule. Yet the cost, safety, and competitive benefits of opening commercial nuclear industries to the rigor of international trade are not for the U.S. alone. Open markets would allow consumers everywhere to benefit from lower power costs and safer technologies—and could result in boosting demand for new capacity. Freer trade could fuel a virtuous cycle of growth in the industry, allowing U.S. and other firms a chance to contribute to a global expansion of nuclear power.
- *Help move the Convention on Supplementary Compensation for Nuclear Damage (CSC) forward.* Many countries use the lack of liability protection for U.S. companies as a means to protect their domestic nuclear industry from U.S. competition.

The CSC creates a liability framework to manage international liability issues. Parties to the convention operate under common liability rules for nuclear activities. While the U.S. has ratified the convention, it has not yet come into force because enough other countries have not ratified it. Bringing the convention into force should be a top priority for the Obama Administration.¹

- *Reject further loan guarantees (or their functional equivalent).* The original intent of the loan guarantee program was to help mitigate the political and regulatory uncertainty associated with being among the first companies to build new nuclear plants in the U.S.² With these first projects now receiving the green light to move forward, those uncertainties should be addressed as the plants are constructed. Expanding the program at this point will be counterproductive. It distorts capital markets, stifles competition, encourages government dependence, and suppresses private-sector financing solutions.³

Resist Protectionism. These reactors will be among the first new nuclear power plants ordered and built in America in three decades. The DOE wisely selected companies using different technologies and will operate in both regulated and unregulated markets—a move that better enables market forces, rather than government dictate, to determine the best and most competitive way forward for the industry.

Having access to foreign reactor designers, utilities, component manufactures, and financing ensures that America's nuclear renaissance is safe and competitive and brings the best value to consumers. U.S. policymakers should resist protectionist forces to help bring about America's nuclear renaissance.

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1. Jack Spencer, "Congress Must Implement CSC Treaty to Reinvigorate U.S. Nuclear Industry," Heritage Foundation WebMemo No. 1658, October 9, 2007, at <http://www.heritage.org/Research/EnergyandEnvironment/wm1658.cfm>.
2. Jack Spencer, "Competitive Nuclear Energy Investment: Avoiding Past Policy Mistakes," Heritage Foundation Backgrounder No. 2086, November 15, 2007, at <http://www.heritage.org/Research/EnergyandEnvironment/bg2086.cfm>.
3. Jack Spencer, "The Problem with Increasing Energy Loan Guarantees," Heritage Foundation WebMemo No. 2277, February 6, 2009, at <http://www.heritage.org/Research/EnergyandEnvironment/wm2277.cfm>.