Testimony for the Record

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Committee on Foreign Affairs
Subcommittees on Asia and the Pacific and
Terrorism, Nonproliferation, and Trade
U.S. House of Representatives

Joint Subcommittee Hearing:
Reviewing the U.S.-China Civil Nuclear Cooperation Agreement
July 16, 2015

Chairmen Poe and Salmon and Ranking Members Keating and Sherman, thank you for the opportunity to testify today on this important issue. I am Daniel Lipman, vice president for suppliers and international programs at the Nuclear Energy Institute[1] (NEI). More than 315 NEI members represent all aspects of commercial nuclear technology, from nuclear power plant operators, reactor vendors and major architect/engineering firms to fuel suppliers, component manufacturers, educational and research organizations and labor unions. On behalf of our members, we appreciate the opportunity to provide testimony on the future of civilian nuclear energy cooperation between the United States and China to the House Foreign Affairs Committee Subcommittees on Asia and the Pacific and Terrorism, Nonproliferation, and Trade. NEI and our members also thank Rep. Wilson and Rep. Boyle for offering their resolution to approve the new U.S.-China agreement for civil nuclear cooperation.

During the past decade, U.S. civilian nuclear energy cooperation with China under the current Section 123 agreement has brought significant economic benefits to American workers, the U.S. economy and has advanced important national interests, including nuclear safety and non-proliferation. The industry expects that the new U.S.-China agreement under review by Congress will bring even greater benefits and therefore supports its entry into force without delay or undue encumbrance on commercial cooperation or export licensing.

China's Nuclear Energy Program

China has a rapidly maturing nuclear energy program and will be the epicenter of nuclear energy development for decades to come. This is due in large part to China's growing demand for clean and reliable energy technology. China produces more electricity (5.65 trillion kilowatt-hours in 2014[2]) than any other country. Nuclear energy accounts for just 2.4 percent of China's

[1] The Nuclear Energy Institute is responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including regulatory, financial, technical and legislative issues. NEI members include all companies licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel cycle facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

[2] CIA World Factbook, China Energy Sector, June 26, 2015 (https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html).

electricity generation[3] but is expected to play a growing role in future years as China makes major investments to meet growing electricity demand while working to meet its clean air and climate goals.

China operates 27 nuclear energy generation facilities. With 24 reactors under construction and another 14 slated to begin construction by 2017, China is the world's largest market for nuclear plant construction. By 2030, China is expected to be operating the largest nuclear energy program in the world with an installed capacity exceeding 133 gigawatts. A recent market assessment by UxC (Attachment 1) estimates that China will account for 43 percent of the new nuclear energy capacity installed globally through 2040.

The Chinese operating fleet is composed of several reactor designs, including designs from Canada, France and Russia, as well as indigenous designs. There are four U.S.-supplied reactors (Westinghouse AP1000s) under construction in China with the first reactor scheduled to come online next year. China's near- to mid-term nuclear energy construction plans focus on the use of Westinghouse AP1000 technology, including the Chinese indigenized design CAP-1400, and an indigenous reactor design known as Hualong One. China also has plans to develop advanced reactors such as high temperature gas-cooled reactors and fast reactors and to become a nuclear exporter in the global nuclear market.

Economic Impacts of U.S.-China Nuclear Trade

With the extensive delays in implementation of the 1985 agreement for civil nuclear cooperation with China, significant U.S. commercial cooperation did not begin until nearly 20 years after the agreement was signed when Westinghouse submitted its bid to sell four reactors to China. During the past decade, U.S.-China cooperation has resulted in approximately $12.5 billion in U.S. exports. A major participant in the Chinese market, Westinghouse, has reported that the current AP1000 program in China has allowed the company to hire thousands of additional staff and has generated thousands more jobs at more than 100 Westinghouse suppliers in more than two dozen states.

Experience has shown that, as with large nuclear development programs elsewhere, the percent of U.S. content in subsequent reactors that are constructed in China will decline. However, as we have seen in the case of other major nuclear markets like South Korea and Japan, the U.S. industry remains significantly engaged in reactor development in the partner country and often partners with indigenous companies on projects in third countries. In the case of China, industry expects that U.S. content in each subsequent Chinese reactor will be less than that in the first four reactors that were constructed. However, U.S. nuclear exports will still be significant and the rapid expansion of the nuclear construction program in China will provide, in the aggregate, strong and sustained U.S. nuclear export opportunities for reactor construction.

With contracts under negotiation to build additional AP1000 reactors in the near term and plans for even more after that, U.S. firms like Westinghouse and their U.S.-based suppliers stand to see significant opportunities in the Chinese market for decades. According to UxC's analysis, U.S.

[3] IAEA Power Reactor Information System, June 26, 2015, (https://www.iaea.org/pris/CountryStatistics/CountryDetails.aspx?current=CN)

exports for nuclear plant construction in China are expected to be in the range of $3 billion to $7 billion per year through 2040.

As Chinese nuclear energy plans become a reality and more plants enter operation, the market for U.S. nuclear energy companies to support ongoing maintenance, modification and operation of a growing nuclear industry will expand commensurately. Each nuclear plant that is brought into operation will provide the U.S. industry with a 40- to 60-year opportunity to provide ongoing support services and products. With this service and support, U.S. companies will continue to share operational safety expertise and culture that will help ensure safety and security. UxC recently estimated the value of this export opportunity growing from $300 million to $500 million annually through 2020 to $1 billion annually by 2030 and $2 billion annually by 2040. This would equate to roughly 2,500 jobs today and grow to more than 9,000 U.S. jobs by 2040.

Beyond nuclear plant construction and support for existing nuclear plants, the U.S. export opportunity in China includes the fuel-cycle market and project development in third countries. Through 2040, the direct economic benefit to the U.S. of the renewed nuclear cooperation agreement with China is expected to be between $70 billion and $204 billion, with between 20,000 and 45,000 direct American jobs supported annually. In addition to these direct jobs, indirect jobs and induced jobs will be created, further benefitting the U.S. economy. In Westinghouse's case, the company reports that its direct sub-suppliers for the current China projects include firms in more than two dozen states, and the suppliers to their direct sub-suppliers operate in nearly every state. In the absence of an expanding U.S. reactor construction program in the near term, it is this type of impact that will help ensure a strong and vibrant nuclear supply chain in the United States.

In addition to the exports and related jobs they support, U.S. electricity consumers will also see real benefit from renewal of the U.S.-China agreement. The first-of-a-kind AP1000 reactors under construction in China are imparting important lessons-learned and technical insights to the four AP1000 reactors under construction in Georgia and South Carolina. This exchange is an important input to startup testing, plant commissioning and training of plant personnel for U.S. reactors. In future years, this exchange will assist U.S. nuclear operators in achieving greater efficiency in maintenance and refueling with consequent savings for U.S. consumers.

Finally, the agreement is critical to allowing the continuation of research and development that will be the basis for advanced reactor designs. For example, TerraPower in Washington state is collaborating with Chinese partners to develop its innovative fast reactor design, known as the traveling wave reactor. If successful, this project will establish U.S. leadership in the market for Generation IV reactor designs.

International Policy Objectives

U.S. nuclear cooperation with and commercial engagement in China advances America's global nuclear safety, security and nonproliferation goals. It also helps China meet its climate goals, as nuclear energy is expected to be China's fastest growing source of non-carbon emitting electric

generation through 2030. Continuation of U.S. cooperation will help support China's plans to expand its nuclear energy generation capacity with U.S. technologies.

U.S. commercial involvement ensures the highest possible levels of nuclear power plant safety and reliability, maintains U.S. leadership in nuclear energy technology and strengthens U.S. influence over global nuclear nonproliferation policy and practices. Noted national security experts agree that "one of our nation's most powerful tools for guaranteeing that countries acquiring this [nuclear] technology continue to use it exclusively for peaceful purposes is to ensure that the U.S. commercial nuclear industry continues to play a leading role in the international civil nuclear marketplace."[4]

The U.S.-China agreement provides critical nonproliferation benefits. These include significant commitments to safeguard materials, to prevent material diversion for non-peaceful purposes, and to provide security for these materials. U.S. nuclear cooperation with China since 1985 helped to influence significant advances in China's nuclear nonproliferation policies and practices. China signed the Nuclear Nonproliferation Treaty, entered into a safeguards agreement and Additional Protocol with the IAEA and joined the Nuclear Suppliers Group. It has, from all available public evidence, moved from being a state engaged in proliferation activities to one that is serious about implementing nuclear export controls (notwithstanding occasional lapses in enforcement). Further, U.S. industry is heartened by the U.S. government's intention in the context of the 123 agreement with China to work to improve export control compliance. We are also encouraged by the Administration's initiative to control nuclear technology transfers under the 123 agreement. This will provide for greater transparency and predictability, which are critical to U.S. industry's competitiveness.

With the world's largest civilian nuclear energy program, the U.S. industry is recognized for reliability, safety and operational excellence. U.S. firms are making major investments in technology development to continue their tradition of innovation. U.S. equipment and technology exports have enabled China to deploy the safest technologies. China is building a fleet of advanced Westinghouse AP1000 power plants, ensuring deployment of the first Generation III+ reactor to receive design certification from the U.S. Nuclear Regulatory Commission. After a nuclear power plant is built, U.S. firms can remain engaged throughout its operation, which can last half a century or more, thus maintaining a physical presence at nuclear facilities and influence over safe operating practices. China's adoption of U.S. technology has deepened U.S. relationships with China's nuclear energy sector.

Conclusion

Continuation of nuclear cooperation with China provides the United States a unique opportunity to meet several national imperatives at the same time: (1) increasing U.S. influence over nuclear nonproliferation policy and practices in the fastest growing and soon to be largest global market for nuclear energy goods and services; (2) ensuring the highest possible levels of nuclear power plant safety and reliability, by exporting U.S. advanced reactor designs and America's world-

[4] April 25, 2013, letter to President Obama from Senator William S. Cohen, Dr. James Schlesinger, Admiral Michael Mullen, Dr. John Hamre, General Brent Scowcroft, General James Jones, Senator Pete Domenici and Ms. Susan Eisenhower (Attachment 2).

class operational expertise; (3) assisting one of the world's largest economies to meet clean air and climate change goals; (4) maintaining U.S. leadership in nuclear energy technology; and (5) creating tens of thousands of American jobs and maintaining a healthy domestic manufacturing base for nuclear energy technology and services.

U.S. industry is well positioned to gain significant benefits from exports to the Chinese market. It would, however, be naïve to believe that the Chinese cannot realize their nuclear energy development goals without the United States. The Chinese have other options. If Congress chooses to prevent U.S. industry from participating in the Chinese market and accruing the benefits outlined above, other vendor nations like Russia and France will benefit. It will also drive the Chinese to accelerate indigenization plans with a corresponding loss of high-paying technology jobs in the United States and a loss of U.S. influence on nuclear safety, security and non-proliferation policies. In addition, it will signal to other nations that the United States is not a serious or reliable partner if it were to terminate or significantly curtail cooperation with the largest commercial nuclear market in the world.

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Attachment 1: *Economic Impacts of U.S. Nuclear Exports to China*, The Ux Consulting Company, LLC, June 2015.

Attachment 2: National security experts' joint letter to President Barack Obama, April 25, 2013.

Economic Impacts of U.S. Nuclear Exports to China

The Ux Consulting Company, LLC (UxC) has prepared this special analysis on the topic of U.S. Nuclear Exports to China with a specific focus on the economic and trade impacts of China's nuclear energy program on the U.S. economy. As the current U.S.-China Peaceful Nuclear Cooperation Agreement (123 Agreement) will expire in December 2015, President Obama has submitted a 30-year renewal of this agreement to the U.S. Congress for review. In order to help inform policymakers and other stakeholders, this summary report presents the key findings from UxC's work, including data and analysis on the economic impact of U.S.-China nuclear trade to date. Furthermore, this report forecasts the outlook for future nuclear trade between China and the U.S., with a specific focus on U.S. nuclear exports and their jobs impacts on the U.S. economy over the next 25 years.

Forecasts for China's Nuclear Power Program

With nearly half of all the world's new reactors currently under construction, China has emerged as the most critical market for nuclear energy. The country is expected to account for about 43% of the nuclear generating capacity installed in the entire world between now and 2040 under a Base Case scenario. China is therefore destined to be the main global driver for nuclear energy expansion over at least the next two decades, and likely for even longer.

UxC's Base Case forecast shows that China should reach around 26.5 GWe from 30 units by the end of 2015 based on the current reactor projects under construction. By 2020, we predict 50 units producing a total of 47 GWe, which is well below the official government nuclear power target of 58 GWe due to our reading of the current pace of construction and likely delays with projects that will commence construction in the coming few years due to the deployment of new reactor designs. However, by 2025, we foresee China's growth rate ramping up more quickly, with 92 units (91 GWe) in operation, and for 2030, our updated Base Case shows 129 units producing 133 GWe. Our current long-term 2040 outlook remains bullish about continued reactor growth in China with 199 operating units for a total of 227 GWe in capacity.

Table 1 shows UxC's current list of near term reactor construction starts in China, which amounts to 14 units and nearly 16 GWe. As this data demonstrates, nearly all near-term projects will be based on either Westinghouse's AP1000 or domestic Chinese designs. China appears to be targeting the deployment of mainly two types of nuclear reactor designs in the future, the localized AP1000 (and follow up versions such as the CAP1400) and the Hualong-1 reactor. The new AP1000 projects are currently in various stages of licensing. According to UxC's estimates, three reactors will start construction in 2015, seven in 2016, and four in 2017. Additional projects beyond 2017 are highly likely, and therefore these numbers are expected to increase once there is more detailed information about specific new reactor projects.

Table 1. Near Term Planned Reactors in China (Listed by Estimated Construction Start)				
Reactor	**Owner**	**Design**	**MWe net**	**Constr. Start**
Fangchenggang 3	CGN	Hualong-1	1,000	2015
Hongyanhe 6	CGN	ACPR-1000	1,000	2015
Shidaowan II-1	Huaneng	CAP1400	1,400	2015
Fuqing 6	CNNC	Hualong-1	1,000	2016
Xudabao 1	CNNC	AP1000	1,117	2016
Sanmen 3	CNNC	AP1000	1,117	2016
Lufeng 1	CGN	AP1000	1,117	2016
Fangchenggang 4	CGN	Hualong-1	1,000	2016
Haiyang 3	CPIC	AP1000	1,117	2016
Shidaowan II-2	Huaneng	CAP1400	1,400	2016
Xudabao 2	CNNC	AP1000	1,117	2017
Sanmen 4	CNNC	AP1000	1,117	2017
Lufeng 2	CGN	AP1000	1,117	2017
Haiyang 4	CPIC	AP1000	1,117	2017
Total: 14			**15,736**	

U.S. Participation in China's Nuclear Industry

Numerous American companies are involved in providing services and technology to the Chinese nuclear market, and these companies generate revenue and employment opportunities in several U.S. states. The projects that have benefitted from American supplies are not only the AP1000 projects, but also the French EPR design as well as Chinese domestic reactor designs. Moreover, based on joint ventures and strategic partnerships signed over the past decade, American companies are also expected to be involved in future reactor plans in China, such as additional AP1000 units and the follow-up version CAP1400. Finally, there are also plans to cooperate with Chinese companies in order to support reactor projects overseas, such as in the case of Turkey. UxC counts at least 40 separate U.S. companies that are active in the Chinese nuclear market through either existing contracts, joint ventures, and/or ongoing marketing initiatives.

Based on available information, Table 2 presents UxC estimates of the total economic impact over the past decade for all U.S. commercial agreements related to China's nuclear energy program. Note that this data reflects the sum total for roughly the period 2005-2015.

Table 2. Total Value and Job Impacts of Past and Current U.S. Commercial Nuclear Agreements in China	
Total U.S. Exports to China (2005-2015)	$12.15 billion
Annual Average over Ten Year Period	$1.2 billion

As the above table indicates, U.S. companies have already benefited substantially from the rapid expansion of China's nuclear energy market. Moreover, it is highly likely that the actual economic benefit is higher than our estimate, especially when considering the ancillary effects from direct and indirect jobs created by these U.S. exports to China.

Forecasts for U.S. Nuclear Exports to China

Looking to the future, UxC has forecast a high and low range for U.S. nuclear exports to China through the year 2040 in four distinct market sectors as follows:

- **New Reactor Market:** UxC anticipates a potential U.S. nuclear export opportunity to China's new reactor sector of approximately $3-7 billion per year for the entire period through 2040. The near-term outlook through the early 2020s is higher as more AP1000s will likely be built with involvement from key U.S. companies (e.g., Westinghouse, CB&I, etc.). A complete drop off is not expected due to a number of factors, including the fact that U.S. companies will benefit from joint ventures and technology licenses as well as ongoing technological innovation. Thus, an annualized average of around $4.5 billion could be considered a reasonable Base Case export opportunity for U.S. companies in China's new reactor sector.

- **Reactor Operations & Services Market:** The opportunity for U.S. exports in the reactor operations sector is smaller than those for new reactor construction; however, the upside growth potential over time is much larger. UxC anticipates a potential U.S. nuclear export opportunity to China's reactor operations sector of around $300-$500 million for the coming five years or so, followed by a much wider range through 2040. By 2040, the export levels are $1.4 billion in the Low case and $2.7 billion in the High case. A reasonable Base Case export opportunity for U.S. companies in this sector is around $1 billion per year in 2030 and $2 billion per year in 2040.

- **Nuclear Fuel Cycle Market:** The total opportunity for U.S. exports in the nuclear fuel cycle sector is smaller than the reactor sectors since the fuel cycle sector is smaller than the other two sectors, plus China is expected to push heavily for self-sufficiency in its fuel cycle program. Overall, the dollar value range for U.S. exports in the nuclear fuel cycle sector under UxC's two forecast cases goes from $70-$190 million in 2015 to between $400 million and $1 billion in 2040. The growth in both forecast cases reflects the growing fuel cycle requirements in China as the reactor fleet expands along with inflationary and other factors.

- **International Reactor Projects:** In total, UxC forecasts 410 new reactors being built in the world through 2040 in our Base Case. Of these, there is the potential that Chinese companies will become the lead vendors for around 10% of these units (especially in the period after 2025). If China builds 20 reactors overseas, this would certainly result in a substantial amount of money – upwards of $100 billion over a period of about 20 years (~2020-2040). Even if U.S. companies only achieve a 2-3% share of this total, this would still amount to $2-3 billion. Unfortunately, the timing of when these exports would be realized is currently nearly impossible to predict.

Conclusions

China's nuclear industry is far from self-sufficient today, and when reviewing the past experience of other leading nuclear power countries, such as France, Japan, and South Korea, there is clear evidence that even countries with significant domestic capabilities in nuclear power often rely on imports of products and services, including from the U.S., over the long-term.

Figure 1 sums up all of UxC's forecasts through 2040, including exports for new reactor construction, operating reactor services, and fuel cycle supplies. The accompanying Table 3 provides the numerical data for 2015-2025. There is sound evidence to support the conclusion that a minimum level of $3 billion in U.S. exports to China associated with its nuclear energy program can be sustained for the period through 2040. If the High case materializes, this level increases to about $8 billion per year.

Figure 1. UxC Forecast Range for Total U.S. Exports to China's Nuclear Market, 2015-2040

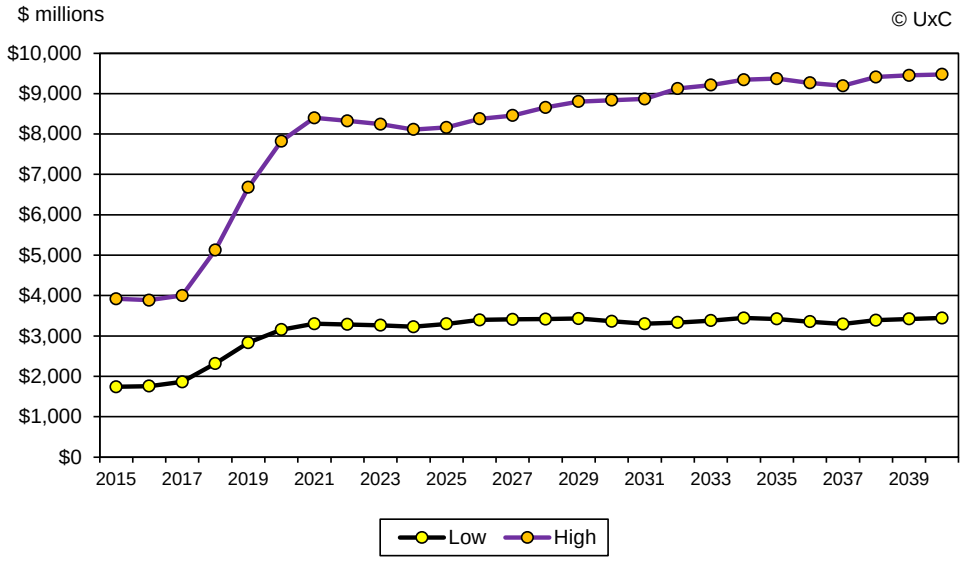


Table 3. UxC Forecast Range for U.S. Total U.S. Exports to China's Nuclear Market, 2015-2025											
$ millions	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Low	$1,741	$1,756	$1,861	$2,317	$2,833	$3,156	$3,301	$3,284	$3,264	$3,228	$3,29
High	$3,921	$3,886	$4,001	$5,128	$6,677	$7,823	$8,400	$8,326	$8,243	$8,112	$8,16
Midpoint	*$2,831*	*$2,821*	*$2,931*	*$3,723*	*$4,755*	*$5,490*	*$5,850*	*$5,805*	*$5,754*	*$5,670*	*$5,73*

Based on this future export outlook, UxC's analysis of jobs creation potential from U.S. nuclear trade with China shows that the range is likely to be somewhere between 20,000 and 45,000 jobs per year for most of the forecast period (see Table 4). This is significant, as these will be high-paying jobs in advanced industries across a broad range of disciplines and in many different states around the U.S.

Table 4. UxC Forecast Range for U.S. Jobs Created from China Nuclear Trade, 2015-2025											
US jobs	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Low	10,879	10,814	11,290	13,860	16,706	18,351	18,928	18,573	18,215	17,776	17,92
High	24,504	23,927	24,276	30,672	39,370	45,482	48,165	47,091	45,999	44,668	44,36
Midpoint	*17,691*	*17,371*	*17,783*	*22,266*	*28,038*	*31,917*	*33,546*	*32,832*	*32,107*	*31,222*	*31,14*

As this study's aim has been to quantify the direct economic impacts on the U.S. from future nuclear trade with China, the consequences of a complete end to the cooperation agreement can be relatively easily deduced. No more future nuclear trade with China after 2015 would result in:

- A loss of $70 billion (Low Case) to $204 billion (High Case) in total exports through 2040
- A loss of 20,000-45,000 quality U.S. jobs per year for the next 25 years

CSIS | CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

April 25, 2013

President Barack Obama
The White House
1600 Pennsylvania Avenue, NW
Washington, D.C. 20500

Dear Mr. President:

We write to underscore the importance of preventing nuclear weapons proliferation, and to caution against the adoption of policies that could inadvertently weaken the ability of the United States to continue to provide international leadership on this critically important issue.

For more than half a century, the cornerstone of global efforts to prevent nuclear weapons proliferation has been the "atoms for peace" formula. With very few exceptions, the countries of the world have accepted this formula. Countries that enter into it commit not to pursue nuclear weapons, and in exchange are guaranteed support for their right to develop civil nuclear power and other peaceful uses of atomic energy, and submit to international supervision.

The Atoms for Peace formula has been very successful. Access to commercial nuclear technology was not seen as a threat to the nuclear nonproliferation regime, but rather as a sign of the health of that regime and an essential means for implementing it. One of our nation's most powerful tools for guaranteeing that the countries acquiring this technology continue to use it exclusively for peaceful purposes is to ensure that the U.S. commercial nuclear industry continues to play a leading role in the international civil nuclear marketplace. Here the news is not encouraging.

While the United States and one or two other countries had a near-monopoly on civil nuclear technology in the 1950s, today the list of countries actively competing in the international civil nuclear marketplace includes Russia, France, Canada, Great Britain, Germany, the Netherlands, Japan and South Korea. And it is likely soon that China and India will become active participants in the international nuclear marketplace. According to a November 2010 Government Accountability Office (GAO) report on nuclear commerce, the U.S. share of global exports of "nuclear reactors, major components and equipment, and minor reactor parts" fell from 11 percent to just 7 percent between 1994 and 2008. The U.S. share of global exports of nuclear fuel fell from 29 percent to just 10 percent over that same period of time.

This decline in U.S. market share translates to substantially diminished U.S. influence in such areas as nuclear nonproliferation and nuclear safety. As a result, the United States is in an increasingly weak position to unilaterally impose onerous requirements on potential buyers of civil nuclear technology, simply because buyers have so many alternatives to U.S. sources of supply. It follows that, in order to restore its nonproliferation influence around the globe, the United States Government must find ways to strengthen the competitiveness of the U.S. nuclear industry, and avoid policies that threaten to further weaken it.

We therefore urge that, as part of your export control reform initiative, streamlining of the process for licensing civil nuclear exports be made a top priority. We know that there are experts who

argue that we should make access to American nuclear technology even more restrictive in the future. This would have the unintended effect of further diminishing America's competitiveness in the global nuclear marketplace. America's ability to lead the global nuclear nonproliferation regime will diminish steadily as America abandons the field.

Consistent with the Atoms for Peace policy framework, America restricts the right of other countries to buy from American nuclear suppliers unless those countries agreed to stringent security procedures and conditions (the so-called 123 process). Historically we have managed this process on a sensible case-by-case basis. If we adopt a much more restrictive approach, we will not prevent countries from acquiring nuclear technology, but instead will encourage nations to turn to suppliers that do not impose difficult standards. The non-proliferation regime is weakened in that circumstance.

We share your Administration's concern about the risks associated with the potential spread of sensitive nuclear fuel cycle technologies such as enrichment and reprocessing. But as our nation seeks to reduce these risks, we must be careful not to diminish America's influence in the international civil nuclear marketplace. America's nuclear industry exports are shrinking, and this is bad for non-proliferation policy.

The U.S. Government must recognize that the U.S. civil nuclear industry is one of its most powerful tools for advancing its nuclear nonproliferation agenda. It is critical to adopt policies that will strengthen that tool. Weakening it will merely cede foreign markets to other suppliers less concerned about nonproliferation than the United States.

Sincerely,

Senator William S. Cohen
Former Secretary of Defense

General Brent Scowcroft
Former National Security Adviser

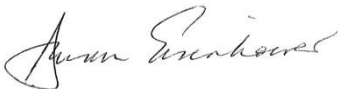
Dr. James Schlesinger
Former Secretary of Energy, Secretary of Defense and Director, CIA

General James Jones
Former National Security Adviser

Admiral Michael Mullen
Former Chairman, Joint Chiefs of Staff

Senator Pete Domenici
Former Chairman Senate Budget Committee

Dr. John Hamre
Former Deputy Secretary of Defense



Ms. Susan Eisenhower
Chairman Emeritus, Eisenhower Institute