

QUESTION FROM CHAIRMAN UPTON

NNSA RFI on High-Assay LEU

Q1. Please describe the current status of the NNSA's Request for Information DE-SOL-0008552 for Supply of Enriched Uranium and what NNSA's next steps are as it relates to information received under this solicitation.

A1. NNSA released its Request for Information (RFI) for Supply of Enriched Uranium in January of 2017. The RFI complies with DOE Order 413.3B and allowed NNSA to conduct market research on any commercial entities with an interest in meeting the Department's various enriched uranium needs (Low Enriched Uranium (LEU) for tritium production; High Assay LEU for research reactors, advanced commercial reactors, and medical isotope production; and Highly Enriched Uranium for naval propulsion).

NNSA received responses to the RFI in March 2017 and held an industry day in November 2017 to meet with interested parties. Information gathered through this RFI and at the subsequent Industry Day will inform an NNSA acquisition strategy in accordance with DOE Order 413.3B. The Department approved the mission need critical decision – 0 (CD-0) for a domestic uranium enrichment capability in December 2016, and is currently executing an Analysis of Alternatives (AoA). The AoA is estimated to be completed at the end of calendar year 2019, as stated in the Fiscal Year 2019 Stockpile Stewardship and Management Plan (SSMP), pages 2-33 to 2-34.

QUESTION FROM CHAIRMAN UPTON

Atomic Energy Act and International Nuclear Markets

Q2. The purpose of the Atomic Energy Act is to provide: "a program of international cooperation to promote the common defense and security and to make available to cooperating nations the benefits of peaceful applications of atomic energy as widely as expanding technology and considerations of the common defense and security will permit." However, the statute was enacted when the U.S. was one of only a small handful of countries that had access to atomic energy.

a. Would you agree that the purpose of the Atomic Energy Act to provide for international peaceful use of atomic energy remains important for the nation, even while the global nuclear landscape has changed?

b. Would you consider it beneficial for Congress to modernize the Atomic Energy Act to reflect the current reality, to ensure continued U.S. participation in the global nuclear power development and use?

A2. Pursuant to Section 1 of the Atomic Energy Act of 1954, as amended (AEA), it is the policy of the United States that the development, use, and control of atomic energy shall be directed so as to make the maximum contribution to the general welfare, subject at all times to the paramount objective of making the maximum contribution to the common defense and security. Providing for international peaceful use of atomic energy, as called for in the AEA, remains important for the nation despite changes in the global nuclear landscape. If Congress proposes to amend the Atomic Energy Act, the Administration would review such legislation for consistency with the President's program.

QUESTION FROM CHAIRMAN UPTON

Nuclear Export Requirements

- Q3. For US persons to directly or indirectly provide assistance for the production of special nuclear material pursuant to 10 CFR Part 810 it currently requires the Secretary of Energy's approval and the concurrence of the State Department. What other nuclear export control regulations require the Secretary or equivalent cabinet-level approval?
- A3. 10 CFR Part 810 is the only U.S. nuclear export control regulation that uniformly requires approval by the Secretary or an equivalent cabinet-level official. The FY 2019 National Defense Authorization Act permits the Secretary to delegate approval of certain applications, and DOE is in the process of implementing this new legal direction.

QUESTION FROM CHAIRMAN UPTON

Secretarial Approval for 810 Authorization Requests

Q4. Is the Secretary's approval required for extension or minor-amendments such as the changing of an applicant's name of authorizations already in force? If so, how long does it typically take obtain the Secretary's approval for these minor amendments?

A4. When a specific authorization under 10 CFR Part 810 is issued, the approver signs a formal determination that describes the scope of the authorization and its duration. Extension of a specific authorization beyond its original duration requires further approval by DOE. Substantive changes to the scope of a specific authorization, such as transferring a new type of technology, also require further approval by DOE. However, non-substantive changes, such as changes in an applicant's name, do not require further approval by DOE.

Obtaining approval for renewals of and amendments to existing specific authorizations takes approximately the same amount of time as requesting a new authorization, because DOE must obtain the same government-to-government nonproliferation assurances and must complete the same interagency concurrences and consultations. Pursuant to the Administrative Procedure Act, U.S. companies that file timely requests for the renewal of existing specific authorizations are permitted to continue ongoing activities until a final decision is made on the renewal request.

QUESTION FROM CHAIRMAN UPTON

AEA Secretary Actions

- Q5. Do all of the Department's civil nuclear regulatory obligations in the Atomic Energy Act require the Secretary of Energy's approval to allow normal transactions to take place?
- A5. No, DOE has other statutory civil nuclear obligations under the Atomic Energy Act, as amended (AEA), that may be delegated to officials subordinate to the Secretary. For example, as authorized under Section 161n. of the AEA, the Secretary has delegated his authority under Section 131 of the AEA to enter into subsequent arrangements under an agreement for peaceful nuclear cooperation. These arrangements are used to convey U.S. consent for retransfers and other activities associated with U.S.-obligated nuclear material. Additionally, the FY 2019 NDAA authorizes the Secretary to delegate approval authority for certain Part 810 applications.

QUESTION FROM REPRESENTATIVE BUSCHON

Q1. Has your office discussed how the isotope consortium could apply to an advanced fuel program?

A1. No, we have not yet explored how the National Isotope Development Center, a program within the Department of Energy Office of Science, could apply to an advanced fuel program.

QUESTION FROM REPRESENTATIVE JOHNSON

Q1. Do you know if there were any delegations to your knowledge that involved unacceptable proliferation risk or created an unacceptable lack of visibility by the secretary's office over the proposed exports?

A1. The authority to approve requests to directly or indirectly engage or participate in the development or production of any special nuclear material outside of the United States has never been delegated, because, until recently, Section 161n of the AEA prohibited delegation. However, as discussed above, other authorities under the AEA related to civil nuclear cooperation have been delegated, as allowed by law. I am aware of no instance where such delegations involved unacceptable proliferation risk or created an unacceptable lack of visibility for the Secretary's office.

QUESTION FROM REPRESENTATIVE DOYLE

Q1. How is the NNSA working with other agencies to ensure that trade can continue to support American jobs without violating the NDAA review requirements and without posing a threat to national security? And more specifically, can you provide more information on the agency's overall strategy with regards to exports to China?

A1. The U.S. Government increasingly is concerned with the attempted illicit appropriation of U.S. technology by China.

The 2015 Agreement for Cooperation with China Regarding the Peaceful Uses of Nuclear Energy (123 Agreement) included unique nonproliferation controls meant to address this nonproliferation challenge. The 123 Agreement includes unclassified peaceful nuclear technology exports within the scope of its terms, as well as a provision in the Agreed Minute that mandates the United States and China to create a joint training program to help exporters in both countries understand the legally binding terms and obligations in the agreement.

The 123 Agreement received a great deal of Congressional attention over concerns about China's potential for improperly diverting or retransferring items or technology subject to the agreement. In response, Congress included provisions in the FY 2016 National Defense Authorization Act that require review of potential transfers of nuclear technology by the Office of the Director of National Intelligence, in order to provide the Department of Energy (DOE) and other interested Departments and Agencies with greater insight into China's activities in this area.

The Administration has built upon the prior improvements to the nonproliferation architecture to address this continually evolving threat. As noted in the 2017 U.S. National Security Strategy (NSS), China wants to shape a world antithetical to U.S. values and interests and is building the most capable and well-funded military in the world, after our own. Part of China's military modernization and economic expansion is due to its access to the U.S. innovation economy, and competitors such as China steal U.S. intellectual property valued at hundreds of billions of dollars each year. The NSS identifies a number of steps that the United States will take to address this threat, including to protect intellectual property through counterintelligence and law enforcement activities, tighten visa procedures, and protect data and underlying infrastructure. The policy direction in the NSS guides the Administration's regulation of exports of U.S. nuclear technology and assistance.

In January 2017, Allen Ho, a naturalized U.S. citizen born in China, pled guilty to conspiring to unlawfully engage or participate in the production or development of special nuclear material outside the United States, without the required authorization from DOE, in violation of the Atomic Energy Act (AEA) of 1954, as amended, and 10 CFR Part 810 (Part 810) regulations. Subsequently sentenced to two years in prison, Ho's prosecution constitutes the first criminal prosecution for violations of Part 810 regulations. China General Nuclear (CGN), a major Chinese state-owned nuclear power company, also was indicted. CGN has failed to respond to the indictment, and the FBI's investigation into "un-named co-conspirators" in the indictment is ongoing. The United States continues to deliberate how to handle exports involving CGN given this

information, but understands that other countries (United Kingdom, France, South Korea, and Saudi Arabia) are cooperating with CGN on their nuclear programs.

For these reasons, DOE applications for export of nuclear-related technology and Nuclear Regulatory Commission applications for export of equipment to China are backlogged, as we have been unable to obtain required concurrence from the Department of State or positive reviews from the other agencies involved. No particular company or particular proposed transfer has been singled out; this applies to all potential transfers to China. The Administration has initiated a policy review of the overall U.S. approach to civil nuclear cooperation with China and is considering economic value to U.S. companies as part of the on-going dialogue on this issue.

QUESTIONS FROM REPRESENTATIVE TONKO

Q1. Currently, would those Part 810 reviews qualify as low proliferation risks?

A1. Section 4(b) of the Advancing U.S. Nuclear Competitiveness and Jobs Act directs the Secretary to establish procedures for expedited consideration of requests for authorizations regarding the transfer of low-proliferation risk reactor technologies to certain designated foreign countries. The bill authorizes the Secretary to designate which technologies and foreign countries are eligible, with certain limitations. Should this bill become law, DOE will work with the U.S. interagency to develop recommendations for the Secretary as to which reactor technologies and destinations should be designated as eligible for the expedited procedures.

Until that process is completed, I cannot provide a specific estimate of the proportion of Part 810 applications that would be eligible for the expedited procedures for low proliferation risk reactor technologies. However, China and Russia are ineligible for the expedited procedures pursuant to the bill's draft text, and they are two of the destinations with the highest volume of requests for specific authorization under Part 810. As such, I expect that the expedited procedures would apply to less than half of the applications for specific authorizations submitted under Part 810.

QUESTIONS FROM REPRESENTATIVE TONKO

Q2. Does the Part 810 process look just at the technology or also the conditions within the potential partner country? That is to say, is the current review process the same for each potential partner country?

A2. In considering whether to approve an application for specific authorization under Part 810, the process takes into account an analysis of the technology to be transferred as well as the foreign company and government that would be receiving the technology. The specific factors to be considered are documented in 10 CFR 810.9, *Grant of Specific Authorization*, and include the significance of the transferred technology relative to the existing nuclear capabilities of the recipient country, whether the recipient country is in good standing with its acknowledged nonproliferation commitments, whether the country has accepted IAEA safeguards obligations on all nuclear materials used for peaceful purposes and has them in force, and seven other factors.