

ONE HUNDRED FIFTEENTH CONGRESS  
**Congress of the United States**  
**House of Representatives**

COMMITTEE ON ENERGY AND COMMERCE

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June 19, 2018

Mr. Ed McGinnis  
Principal Deputy Assistant Secretary  
Office of Nuclear Energy  
Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20585

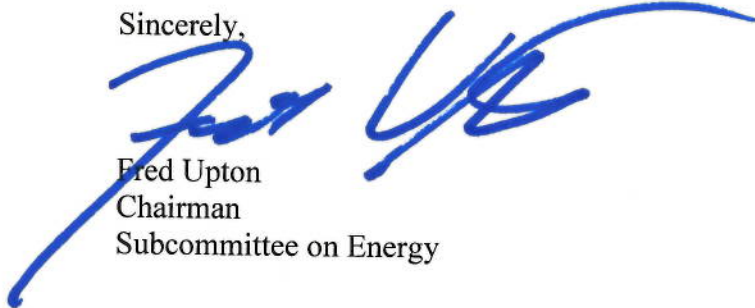
Dear Mr. McGinnis:

Thank you for appearing before the Subcommittee on Energy on Tuesday, May 22, 2018, to testify at the hearing entitled "DOE Modernization: Legislation Addressing Development, Regulation, and Competitiveness of Advanced Nuclear Energy Technologies."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. Also attached are Member requests made during the hearing. To facilitate the printing of the hearing record, please respond to these questions and requests with a transmittal letter by the close of business on Tuesday, July 3, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to [Kelly.Collins@mail.house.gov](mailto:Kelly.Collins@mail.house.gov).

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



Fred Upton  
Chairman  
Subcommittee on Energy

cc: The Honorable Bobby L. Rush, Ranking Member, Subcommittee on Energy

Attachments

## Attachment 1—Additional Questions for the Record

### The Honorable Fred Upton

#### Halden Reactor

1. The Halden Reactor in Norway provides critical research capabilities that are utilized by the U.S. commercial nuclear industry. Are DOE and the Nuclear Regulatory Commission aware of the potential loss of the reactor?
  - a. Is DOE examining what specific steps the U.S. government can undertake to assure this reactor is maintained for use by the international research community?
  - b. Has DOE discussed the potential loss of this facility with the NRC and is there a mutual recognition of the Halden Reactor's capabilities?

#### Atomic Energy Act and International Nuclear Markets

1. 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?

#### Nuclear Fuel Cycle Competition

1. During the hearing, Congressman Shimkus asked about the Office of Nuclear Energy's plans relating to developing an enrichment facility to serve commercial markets. Mr. McGinnis noted his support for competition and pointed to fuel fabrication facilities. However, there exists a lack of demand for enriched uranium and additional nuclear reactors ceasing operation in the next 7 years.
  - a. What are the market risks of subsidizing commercial competition in enrichment facilities that result over supply of enriched uranium?

- b. Has the Department requested any funding for the Office of Nuclear Energy to develop or build an enrichment facility for commercial HA-LEU production?
- c. Will you commit to notifying the Committee prior to providing any such financial assistance?

#### Russian Uranium Imports

1. What steps is the Department taking to review the pending expiration of the limitation on uranium imports from Russia that will expire in 2020?
  - a. The U.S. is now importing 93% of our nation's need for uranium. What is DOE doing to revive the U.S. domestic uranium production industry? For example, has anyone from the Department discussed revised regulation of U.S. mining facilities by the Environmental Protection Agency?

#### Recycling Navy Spent Fuel

1. Has the Department conducted a cost estimate to reprocess spent nuclear fuel from the U.S. Navy for high-assay LEU?
  - a. Prior to conducting any demonstration or large scale project to reprocess Navy spent nuclear fuel, will the Department commit to conducting such a cost estimate?

#### Need for Underlying Benchmark Data

1. Criticality benchmark data are key to develop the underlying information for the regulatory framework to help provide advanced nuclear fuels. Please describe the nature of this information, why it is necessary and what government or non-government facilities are available to gather the data.

#### Consortium and Cost Recovery for HA-LEU

1. The Advanced Nuclear Fuel Availability Act would establish a public-private consortium to provide material for advanced nuclear fuels and sets up a structure by which consortium members would have access to the material, provided the private entities covered the cost of the nuclear material. If DOE sets up this cost recovery structure, could such a program be carried out with limited budgetary impacts on DOE's overall mission needs?
  - a. DOE currently provides some high-assay LEU for research needs. How is the cost structure is set up for those recipients of HA-LEU?

### National Nuclear Waste Transportation Program Funding

1. On April 16, 2018, the Nuclear Waste Strategy Coalition wrote the Department expressing concern about the decrease in the Department's support for State Regional Groups and Tribal Radioactive Materials Transportation Committee.
  - a. Does DOE remain committed to continuing to provide the same level of funding and engagement for these programs?
  - b. Please describe why the Department curtailed the activities identified by the letter.
  - c. Please provide list of meetings conducted with those organizations beginning in fiscal year 2015 through now.
  - d. Please provide a breakdown of funding provided under this program beginning in fiscal year 2015 through today.

### USEC Restrictions on Enrichment Services

1. How does the Department of Energy reconcile its statements noting interest to develop uranium enrichment capability for high-assay low enriched uranium against the prohibition to provide enrichment services under Section 3112 of the USEC Privatization Act (42 USC 2297h-10)?

### Isotope Consortium and HA-LEU Applicability

1. The Department created the National Isotope Development Center to interface with the user community and manage the coordination of isotope production across the Department's facilities and business operations involved in the sale and distribution of isotopes. Would a similar organization or DOE-led consortium within the Department provide the stability and guidance to the commercial HA-LEU production and user community?

### Report on Price Anderson

1. The NRC has previously reported that advanced nuclear technologies would likely have differing requirements under what is known as "Price Anderson Act." The Price Anderson insurance requirements are based on the risk and generation output of the existing fleet of commercial nuclear power plants. Has DOE had any discussions yet on how the liability requirements under the existing Price Anderson framework would be applied to safer and smaller advanced nuclear designs?

**The Honorable Bill Flores**

1. It is expected that the first commercial deployment of the advanced reactors is about decade away. Leading nuclear companies note, however, that there is a critical need to take the initial steps for high-assay LEU availability now.
  - a. Will you outline for us the number of different regulatory approvals, facility updates, transportation issues, and other milestones that will have to be accomplished to have the advanced fuels available in time for the first movers?

## **Attachment 2—Member Requests for the Record**

*During the hearing, Members asked you to provide additional information for the record, and you indicated that you would provide that information. For your convenience, descriptions of the requested information are provided below.*

### **The Honorable John Shimkus**

1. Are you aware of a recent GAO report that Found DOE's cost estimate to develop new enrichment options lacked credibility because it was not well documented or accurate?