

July 14, 2022

The Honorable John Barrasso
Ranking Member
U.S. Senate Energy and Natural
Resources Committee
307 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Ranking Member Barrasso:

As the premier professional organization representing 10,000 nuclear engineers, scientists, and technologists, who embrace the vital contributions that nuclear technologies make to improving people's lives, the [American Nuclear Society](https://www.ans.org/) (ANS) urged the United States Congress to take swift action to address the lack of a secure and reliable source of fuel for advanced reactors in a letter late last year.

With the recent introduction of Fueling our Nuclear Future Act of 2022, ANS applauds Senator Barrasso's effort to accelerate the availability of HALEU and the establishment of enrichment and deconversion capability in the U.S.

Establishing a domestic high assay low enriched uranium (HALEU) fuel production capability is critical to sustained U.S. leadership in the intensifying global competition to design and build advanced reactors. HALEU is currently available from only two sources: (i) limited amounts from the DOE via down-blending of existing stockpiles of material and (ii) Russia. Without a substantial domestic HALEU enrichment capability, we risk not having the fuel needed to power advanced nuclear energy as part of our clean energy future. Long-term reliance on Russian state-owned uranium producers exposes our largest carbon-free energy source to unacceptable business and political risk. The maturation of new nuclear technologies and advanced reactor designs underscores the need for securing our domestic nuclear fuel supply chains. Many advanced reactors, including many of the Advanced Reactor Demonstration Program (ARDP) awardees, will require HALEU and fuel forms very different from those currently manufactured for Light Water Reactors (LWRs). Without a clear pathway to obtaining HALEU, these projects are at risk of schedule delays. A domestic supply of HALEU will also help to fuel the decarbonization of our economy while creating good-paying jobs in the nuclear energy industry and mining sectors.

Fueling our Nuclear Future Act would prioritize HALEU availability from DOE inventories in the near term and establish HALEU enrichment and deconversion capability in the U.S. These efforts combined are essential to the success of the ARDP demonstration projects and other privately funded advanced reactor efforts that require HALEU.

In the near-term, the bill establishes achievable and appropriate targets for HALEU availability from DOE inventories and authorizes the necessary funding through FY2027. Downblending of high enriched uranium will produce HALEU that can be utilized by all advanced reactors and fuel fabricators.

In the longer term, the bill requires the establishment of a domestic HALEU capacity of not less than 20 MTU per year to be on-line by December 31, 2027. This level of capacity is consistent with the input provided to the Department of Energy's HALEU Request for Information and will provide a strong base capacity that can be expanded as needed.

Please send any questions to ANS Director of Public Policy, John Starkey at jstarkey@ans.org.

Sincerely,

Steven A. Arndt

A handwritten signature in black ink that reads "Steven A. Arndt".

President
American Nuclear Society

Craig H. Piercy

A handwritten signature in black ink that reads "Craig H. Piercy".

Executive Director/CEO
American Nuclear Society