



THE SECRETARY OF ENERGY
WASHINGTON, DC 20585
THE SECRETARY OF THE NAVY
WASHINGTON, DC 20350-1000



March 25, 2018

The Honorable Deb Fischer
Chairman, Subcommittee on Strategic Forces
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Madam Chairman:

Pursuant to Section 3118 of the National Defense Authorization Act (NDAA) for Fiscal Year 2016 (Public Law 114-92) we have jointly determined that the United States should not pursue Research and Development (R&D) of an advanced naval nuclear fuel system based on Low-Enriched Uranium (LEU).

In July 2016, the Department of Energy's National Nuclear Security Administration (DOE/NNSA) delivered the report, "Conceptual Research and Development Plan for Low-Enriched Uranium Naval Fuel," to Congress. As outlined in that report, DOE/NNSA estimated that the scope and schedule required for such an effort would cost approximately \$1 billion over a 10-15 year period, with success not assured. The scope and schedule of DOE/NNSA's assessment was reviewed and independently validated by the JASON advisory group.

The operational needs of United States Navy submarines and aircraft carriers place a high importance on the reactor core energy density. The replacement of highly enriched uranium with LEU would result in a reactor design that is inherently less capable, more expensive, and unlikely to support current life-of-ship submarine reactors. The LEU fuel system would affect operational availability of military assets due to necessary refueling, and would require significant new shipyard infrastructure.

Funding developmental work of this magnitude is not possible without increasing risk to other existing naval nuclear propulsion efforts. A program to pursue R&D of an LEU advanced fuel system would compete for necessary resources against all other NNSA and Department of Defense priorities as part of a future budget request.

The Department of Energy and Department of the Navy appreciate the support of Congress to meet the U.S. Navy's need for warships with safe and effective nuclear reactors that are durable, maneuverable, compact, quiet, and long-lasting.

If you have any questions, please contact Ms. Bridget Forcier with the DOE Office of External Coordination in the Office of the Chief Financial Officer at (202) 586-0176.

Sincerely,

Richard V. Spencer
Secretary of the Navy

Rick Perry
Secretary of Energy

cc: The Honorable Joe Donnelly
Ranking Member