House Committee on Appropriations

Subcommittee on Energy and Water

Rep. James R. Langevin (RI-02)

Testimony – April 18, 2018

Thank you, Chairman Simpson and Ranking Member Kaptur, for allowing Members to testify before you and inform the development of the Fiscal Year 2019 Energy and Water Appropriations bill. I serve on the House Armed Services Committee, and I wish to bring one matter to your attention.

As you may know, the United States has demonstrated strong leadership over the past decade to minimize, and where possible all but eliminate, the use of highly-enriched uranium (HEU) for civilian purposes. Doing so reduces the risk of nuclear terrorism and makes clear that the accumulation of HEU is military in nature, isolating states seeking nuclear weapons capability.

By instead using low-enriched uranium (LEU) in naval reactor fuel, we bring significant national security benefits to bear when it comes to nuclear nonproliferation, lower security costs, and naval reactor research and development at the cutting edge of nuclear science. Pursuing the development of LEU fuel offers the opportunity to achieve transformational progress on fuel technology; the same imperatives do not apply to research and development for HEU fuel improvements.

Additionally, unless an alternative using low-enriched uranium fuel is developed in the coming decades, the United States will have to resume production of bomb-grade uranium for the first time since 1992, ultimately undermining U.S. nonproliferation efforts.

Using LEU for naval reactors is not an impossible task – France's nuclear navy already has converted from HEU to LEU fuel. We must evaluate the feasibility for the U.S. Navy as well, and take into account the potential benefits to U.S. and international security of setting a norm for using LEU instead of nuclear bomb-grade material.

As America confronts the threat of nuclear terrorism and as countries continue to enrich uranium for naval purposes, the imperative to reduce the use of HEU will become increasingly important over the next several decades. As such, Congress has sought to advance these efforts over the last several years by evaluating the potential of utilizing LEU fuel in reactors for U.S. Navy aircraft carriers and submarines.

It is therefore critical that the House of Representatives build upon the progress of previous years and continue to provide funding for this critical research that is paramount to our national security interests. This work should not be a fiscal burden for the U.S. Navy. It is a core tenet of the Defense Nuclear Nonproliferation (DNN) mission, and the resources for this effort should come from the DNN account.

As such, I request you include $15 million in funding to support early testing and manufacturing development required to advance LEU technology for use in naval fuel. Should the Secretary of the Navy and the Secretary of Energy sign an agreement to advance such research and development work, I urge that an additional $30 million be made available for this purpose.

The time has come to invest in new technologies to address the threat and to reduce reliance on highly-enriched uranium. Thank you once again for receiving my testimony and taking my request into consideration for the Fiscal Year 2019 Energy and Water Appropriations

bill. This investment is critical in providing for our collective national security, and I encourage its inclusion.