AMENDMENT TO
RULES COMMITTEE PRINT 117–54
OFFERED BY MR. LANGEVIN OF RHODE ISLAND

At the end of subtitle B of title XVI, add the following:

SEC. 16. PROGRAM FOR RESEARCH AND DEVELOPMENT
OF ADVANCED NAVAL NUCLEAR FUEL SYSTEM BASED ON LOW-ENRICHED URANIUM.

(a) Establishment.—Not later than 60 days after the date of the enactment of this Act, the Administrator for Nuclear Security shall establish a program to assess the viability of using low-enriched uranium in naval nuclear propulsion reactors, including such reactors located on aircraft carriers and submarines, that meet the requirements of the Navy.

(b) Activities.—In carrying out the program under subsection (a), the Administrator shall carry out activities to develop an advanced naval nuclear fuel system based on low-enriched uranium, including activities relating to—

(1) down-blending of high-enriched uranium into low-enriched uranium;

(2) manufacturing of candidate advanced low-enriched uranium fuels;
(3) irradiation tests and post-irradiation examination of these fuels;

(4) modification or procurement of equipment and infrastructure relating to such activities; and

(5) designing naval propulsion reactors that incorporate candidate advanced low enriched uranium fuels.

(c) SUBMISSION OF PLAN.—Not later than 120 days after the date of the enactment of this Act, the Administrator shall submit to the congressional defense committees a plan outlining the activities the Administrator will carry out under the program established under subsection (a), including the funding requirements associated with developing a low-enriched uranium fuel.

(d) REPORT ON PERFORMANCE IMPACT OF LOW-ENRICHED URANIUM REACTOR CORE SIZE.—Not later than December 15, 2022, the Administrator, in consultation with the Secretary of the Navy, shall prepare and submit to the congressional defense committees a report assessing the feasibility and performance impact of a Virginia-Class replacement nuclear powered attack submarine that retains the anticipated hull diameter and power plant design, but leaves sufficient space for a low-enriched uranium-fueled reactor with a life of the ship core, possibly with an increased module length. The report shall assess
the impact on vessel performance of the increased core size
over the range of potential low-enriched uranium fuel
packing densities discussed in the November 2016 JASON
report JSR-16-Task-013, and compare this with the per-
formance impact of recent adjustments of vessel lengths
such as that from the Virginia Payload Module.

(e) FUNDING.—

(1) INCREASE.—Notwithstanding the amounts
set forth in the funding tables in division D, the
amount authorized to be appropriated by this title
for the National Nuclear Security Administration, as
specified in the corresponding funding table in sec-
tion 4701, for Defense Nuclear Nonproliferation,
Defense Nuclear Nonproliferation R&D is hereby in-
creased by $20,000,000 for the purpose of LEU Re-
search and Development for Naval Pressurized
Water Reactors.

(2) OFFSET.—Notwithstanding the amounts set
forth in the funding tables in division D, the amount
authorized to be appropriated by this title for the
National Nuclear Security Administration, as speci-
ified in the corresponding funding table in section
4701, for Defense Nuclear Nonproliferation is here-
by reduced—
(A) by $10,000,000 for the amount for nuclear smuggling detection and deterrence; and

(B) by $10,000,000 for the amount for nuclear detonation detection.