

AMENDMENT TO
RULES COMMITTEE PRINT 119–33
OFFERED BY MR. FOSTER OF ILLINOIS

At the end of subtitle C of title XXXI, insert the following new section:

SEC. 31 __. 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 that meet the requirements of the Navy and are located on aircraft carriers and submarines or would be suitable for incorporation into SSN-AUKUS submarines.

(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, 2025, 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 and an SSN-AUKUS submarine that retains the anticipated hull diameter and power plant design of each submarine, 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 contrast this with the performance 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 section 4701, for Defense Nuclear Nonproliferation, Defense Nuclear Nonproliferation R&D is hereby increased by \$40,000,000 for the purpose of LEU Research 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 specified in the corresponding funding table in section 4701, for Other Defense Activities is hereby reduced by \$40,000,000.