

**AMENDMENT TO RULES COMMITTEE PRINT 118-**

**36**

**OFFERED BY MR. FOSTER OF ILLINOIS**

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

1 **SEC. 31 \_\_\_\_ . PROGRAM FOR RESEARCH AND DEVELOPMENT**  
2 **OF ADVANCED NAVAL NUCLEAR FUEL SYS-**  
3 **TEM BASED ON LOW-ENRICHED URANIUM.**

4 (a) ESTABLISHMENT.—Not later than 60 days after  
5 the date of the enactment of this Act, the Administrator  
6 for Nuclear Security shall establish a program to assess  
7 the viability of using low-enriched uranium in naval nu-  
8 clear propulsion reactors, including such reactors that  
9 meet the requirements of the Navy and are located on air-  
10 craft carriers and submarines or would be suitable for in-  
11 corporation into SSN-AUKUS submarines.

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

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

1           (2) manufacturing of candidate advanced low  
2 enriched uranium fuels;

3           (3) irradiation tests and post-irradiation exam-  
4 ination of these fuels;

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

7           (5) designing naval propulsion reactors that in-  
8 corporate candidate advanced low enriched uranium  
9 fuels.

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

17       (d) REPORT ON PERFORMANCE IMPACT OF LOW-EN-  
18 RICHED URANIUM REACTOR CORE SIZE.—Not later than  
19 December 15, 2024, the Administrator, in consultation  
20 with the Secretary of the Navy, shall prepare and submit  
21 to the congressional defense committees a report assessing  
22 the feasibility and performance impact of a Virginia-Class  
23 replacement nuclear powered attack submarine and an  
24 SSN-AUKUS submarine that retains the anticipated hull  
25 diameter and power plant design of each submarine, but

1 leaves sufficient space for a low-enriched uranium-fueled  
2 reactor with a life of the ship core, possibly with an in-  
3 creased module length. The report shall assess the impact  
4 on vessel performance of the increased core size over the  
5 range of potential low-enriched uranium fuel packing den-  
6 sities discussed in the November 2016 JASON report  
7 JSR-16-Task-013, and contrast this with the perform-  
8 ance impact of recent adjustments of vessel lengths such  
9 as that from the Virginia Payload Module.

10 (e) FUNDING.—

11 (1) INCREASE.—Notwithstanding the amounts  
12 set forth in the funding tables in division D, the  
13 amount authorized to be appropriated by this title  
14 for the National Nuclear Security Administration, as  
15 specified in the corresponding funding table in sec-  
16 tion 4701, for Defense Nuclear Nonproliferation,  
17 Defense Nuclear Nonproliferation R&D is hereby in-  
18 creased by \$40,000,000 for the purpose of LEU Re-  
19 search and Development for Naval Pressurized  
20 Water Reactors.

21 (2) OFFSET.—Notwithstanding the amounts set  
22 forth in the funding tables in division D, the amount  
23 authorized to be appropriated by this title for the  
24 National Nuclear Security Administration, as speci-  
25 fied in the corresponding funding table in section

1       4701, for Defense Nuclear Nonproliferation is here-  
2       by reduced—

3                   (A) by \$20,000,000 for the amount for nu-  
4       clear smuggling detection and deterrence; and

5                   (B) by \$20,000,000 for the amount for nu-  
6       clear detonation detection.

