

AMENDMENT TO RULES COMMITTEE PRINT 118-

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OFFERED BY MR. FOSTER OF ILLINOIS

Strike section 1640.

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

1 **SEC. 16___ . 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 located
9 on aircraft carriers and submarines, that meet the require-
10 ments of the Navy.

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

15 (1) down-blending of high-enriched uranium
16 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, 2023, 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 that re-
24 tains the hull diameter and power plant design, but leaves
25 sufficient space for a low-enriched uranium-fueled reactor

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

9 (e) FUNDING.—

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

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

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

3 (A) by \$10,000,000 for the amount for nu-
4 clear smuggling detection and deterrence; and

5 (B) by \$10,000,000 for the amount for nu-
6 clear detonation detection.

