

AMENDMENT TO RULES COMMITTEE PRINT 118-

36

OFFERED BY MR. DONALDS OF FLORIDA

At the end of subtitle A of title XVI, add the following new section:

1 **SEC. 16___ . STUDY ON USE AND BENEFITS OF ADVANCED**
2 **NUCLEAR REACTORS ON THE MOON AND**
3 **MARS.**

4 (a) **STUDY.**—The Secretary of Defense, in consulta-
5 tion with the Administrator of the National Aeronautics
6 and Space Administration, shall conduct a study on the
7 potential uses and benefits of advanced nuclear reactors
8 on the moon and Mars.

9 (b) **REPORT.**—Not later than 180 days after the date
10 of the enactment of this Act, the Secretary of Defense
11 shall submit to the Committees on Armed Services of the
12 Senate and the House of Representatives a report on the
13 results of the study conducted under subsection (a).

14 (c) **ADVANCE NUCLEAR REACTOR DEFINED.**—In this
15 section, the term “advanced nuclear reactor” means—

16 (1) a nuclear fission reactor, including a proto-
17 type plant (as defined in sections 50.2 and 52.1 of
18 title 10, Code of Federal Regulations (or successor

1 regulations)), with significant improvements com-
2 pared to reactors operating on October 19, 2016, in-
3 cluding improvements such as—

4 (A) additional inherent safety features;

5 (B) lower waste yields;

6 (C) improved fuel and material perform-
7 ance;

8 (D) increased tolerance to loss of fuel cool-
9 ing;

10 (E) enhanced reliability or improved resil-
11 ience;

12 (F) increased proliferation resistance;

13 (G) increased thermal efficiency;

14 (H) reduced consumption of cooling water
15 and other environmental impacts;

16 (I) the ability to integrate into electric ap-
17 plications and nonelectric applications;

18 (J) modular sizes to allow for deployment
19 that corresponds with the demand for electricity
20 or process heat; and

21 (K) operational flexibility to respond to
22 changes in demand for electricity or process
23 heat and to complement integration with inter-
24 mittent renewable energy or energy storage;

25 (2) a fusion reactor; and

- 1 (3) a radioisotope power system that utilizes
- 2 heat from radioactive decay to generate energy.

