

AMENDMENT TO RULES COMMITTEE PRINT 116-

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OFFERED BY MR. FULCHER OF IDAHO

Page 1259, after line 23, insert the following:

1 **SEC. 3105. INTEGRATED ENERGY SYSTEMS PROGRAM.**

2 (a) DEFINITIONS.—In this section:

3 (1) PROGRAM.—The term “program” means
4 the Integrated Energy Systems Program established
5 under subsection (b)(1).

6 (2) SECRETARY.—The term “Secretary” means
7 the Secretary of Energy.

8 (b) ESTABLISHMENT.—

9 (1) IN GENERAL.—The Secretary shall establish
10 a program, to be known as the “Integrated Energy
11 Systems Program”—

12 (A) to maximize energy production and ef-
13 ficiency;

14 (B) to develop energy systems involving
15 the integration of nuclear energy with renew-
16 able energy, fossil energy, and energy storage;
17 and

18 (C) to expand the use of emissions-reduc-
19 ing energy technologies into nonelectric sectors

1 to achieve significant reductions in environ-
2 mental emissions.

3 (2) PROGRAM ADMINISTRATION; PARTNERS.—

4 The program shall be carried out by the Undersecre-
5 tary of Energy, in partnership with—

6 (A) relevant offices within the Department
7 of Energy;

8 (B) National Laboratories;

9 (C) institutions of higher education; and

10 (D) the private sector.

11 (3) GOALS AND MILESTONES.—The Secretary
12 shall establish quantitative goals and milestones for
13 the program.

14 (e) RESEARCH AREAS.—Research areas under the
15 program may include—

16 (1) technology innovation to further the expan-
17 sion of emissions-reducing energy technologies to ac-
18 commodate a modern, resilient grid system by—

19 (A) effectively leveraging multiple energy
20 sources;

21 (B) enhancing and streamlining engineer-
22 ing design;

23 (C) carrying out process demonstrations to
24 optimize performance; and

25 (D) streamlining regulatory review;

1 (2) advanced power cycles, energy extraction,
2 and processing of complex hydrocarbons to produce
3 high-value chemicals;

4 (3) efficient use of emissions-reducing energy
5 technologies for hydrogen production to support
6 transportation and industrial needs;

7 (4) enhancement and acceleration of domestic
8 manufacturing and desalinization technologies and
9 processes by optimally using clean energy sources;

10 (5) more effective thermal energy use, trans-
11 port, and storage;

12 (6) the demonstration of nuclear energy deliv-
13 ery for—

14 (A) the production of chemicals, metals,
15 and fuels;

16 (B) the capture, use, and storage of car-
17 bon;

18 (C) renewable integration with an inte-
19 grated energy system; and

20 (D) conversion of carbon feedstock, such
21 as coal, biomass, natural gas, and refuse waste,
22 to higher value nonelectric commodities;

23 (7) the development of new analysis capabilities
24 to identify the best ways—

1 (A) to leverage multiple energy sources in
2 a given region; and

3 (B) to quantify the benefits of integrated
4 energy systems; and

5 (8) any other area that, as determined by the
6 Secretary, meets the purpose and goals of the pro-
7 gram.

8 (d) GRANTS.—The Secretary may award grants
9 under the program to support the goals of the program.

10 **SEC. 3106. REPORT ON DUPLICATIVE PROGRAMS.**

11 Not later than 1 year after the date of enactment
12 of this Act, and annually thereafter, the Secretary shall
13 submit to Congress a report identifying any program that
14 is duplicative of the program established under section
15 3105(b)(1).

16 **SEC. 3107. LIGHT WATER REACTOR SUSTAINABILITY PRO-**
17 **GRAM.**

18 Section 952 of the Energy Policy Act of 2005 (42
19 U.S.C. 16272) is amended by striking subsection (b) and
20 inserting the following:

21 “(b) LIGHT WATER REACTOR SUSTAINABILITY PRO-
22 GRAM.—The Secretary shall carry out a light water reac-
23 tor sustainability program—

24 “(1) to ensure the achievement of maximum
25 benefits from existing nuclear generation;

1 “(2) to accommodate the increase in applica-
2 tions for nuclear power plant license renewals ex-
3 pected as of the date of enactment of this sub-
4 section;

5 “(3) to enable the continued operation of exist-
6 ing nuclear power plants through technology devel-
7 opment;

8 “(4) to improve the performance and reduce the
9 operation and maintenance costs of nuclear power
10 plants;

11 “(5) to promote the use of high-performance
12 computing to simulate nuclear reactor processes;

13 “(6) to coordinate with other research and de-
14 velopment programs of the Office of Nuclear Energy
15 to ensure that developed technologies and capabili-
16 ties are part of an integrated investment strategy,
17 the overall focus of which is improving the safety,
18 security, reliability, and economics of operating nu-
19 clear power plants; and

20 “(7) to focus on—

21 “(A) new capabilities relating to nuclear
22 energy research and development;

23 “(B) enabling technologies beyond indi-
24 vidual programs;

1 “(C) coordinating capabilities among the
2 research and development programs of the Of-
3 fice of Nuclear Energy;

4 “(D) examining new classes of materials
5 not considered for nuclear applications;

6 “(E) high-risk research, which could poten-
7 tially overcome technological limitations; and

8 “(F) the potential for industry partner-
9 ships to develop technologies relating to stor-
10 age, hydrogen production, high-temperature
11 process heat, and other relevant areas.”.

12 **SEC. 3108. NUCLEAR ENERGY STRATEGIC PLAN.**

13 (a) IN GENERAL.—Subtitle E of title IX of the En-
14 ergy Policy Act of 2005 (42 U.S.C. 16271 et seq.) is
15 amended by adding at the end the following:

16 **“SEC. 959A. NUCLEAR ENERGY STRATEGIC PLAN.**

17 “(a) IN GENERAL.—Not later than 1 year after the
18 date of enactment of this Act, the Secretary shall submit
19 to the Committee on Energy and Natural Resources of
20 the Senate and the Committees on Energy and Commerce
21 and Science, Space, and Technology of the House of Rep-
22 resentatives a 10-year strategic plan for the Office of Nu-
23 clear Energy of the Department, in accordance with this
24 section.

1 “(b) REQUIREMENTS.—In developing the strategic
2 plan under this section, the Secretary shall specify ex-
3 pected timelines for, as applicable—

4 “(1) the accomplishment of relevant objectives
5 under current programs of the Department; or

6 “(2) the commencement of new programs to ac-
7 complish those objectives.

8 “(c) UPDATES.—Not less frequently than once every
9 2 years, the Secretary shall submit to the Committee on
10 Energy and Natural Resources of the Senate and the
11 Committees on Energy and Commerce and Science, Space,
12 and Technology of the House of Representatives an up-
13 dated 10-year strategic plan in accordance with subsection
14 (b), which shall identify, and provide a justification for,
15 any major deviation from a previous strategic plan sub-
16 mitted under this section.”.

17 (b) TABLE OF CONTENTS.—Section 1(b) of the En-
18 ergy Policy Act of 2005 (42 U.S.C. 15801 note) is amend-
19 ed in the table of contents by inserting after the item re-
20 lating to section 959 the following:

“Sec. 959A. Nuclear energy strategic plan.”.

