

AMENDMENT
TO RULES COMMITTEE PRINT 116-63
OFFERED BY MR. PAPPAS OF NEW HAMPSHIRE

At the end of subtitle A of title II, insert the following:

1 **PART III—JOINT LONG-TERM STORAGE**

2 **SEC. 2131. SHORT TITLE.**

3 This part may be cited as the “Joint Long-Term
4 Storage Act of 2020”.

5 **SEC. 2132. PURPOSES.**

6 The purposes of this part are—

7 (1) to facilitate the development of long-dura-
8 tion energy storage technologies;

9 (2) to increase the commercial viability of long-
10 duration energy storage technologies; and

11 (3) to increase the energy resilience and energy
12 security and national security of the United States
13 through the use of long-duration energy storage
14 technologies.

15 **SEC. 2133. LONG-DURATION ENERGY STORAGE DEM-**
16 **ONSTRATION INITIATIVE.**

17 (a) **DEFINITIONS.**—In this section:

1 (1) DIRECTOR OF ARPA-E.—The term “Direc-
2 tor of ARPA-E” means the Secretary of Energy,
3 acting through the Director of the Advanced Re-
4 search Projects Agency–Energy.

5 (2) DIRECTOR OF ESTCP.—The term “Director
6 of ESTCP” means the Secretary of Defense, acting
7 through the Director of the Environmental Security
8 Technology Certification Program of the Depart-
9 ment of Defense.

10 (3) DIRECTORS.—The term “Directors” means
11 the Director of ARPA-E and the Director of
12 ESTCP, acting jointly.

13 (4) INITIATIVE.—The term “Initiative” means
14 the demonstration initiative established under sub-
15 section (b).

16 (5) JOINT PROGRAM.—The term “Joint Pro-
17 gram” means the joint program established under
18 subsection (f).

19 (b) ESTABLISHMENT.—Not later than 200 days after
20 the date of enactment of this Act, the Director of ARPA-
21 E shall establish a demonstration initiative composed of
22 demonstration projects focused on the development of
23 long-duration energy storage technologies.

24 (c) GOALS.—The goals of the Initiative shall be—

1 (1) to demonstrate the potential benefits of
2 long-duration energy storage to—

3 (A) the resilience of the electricity grid, in-
4 cluding the security of critical infrastructure;
5 and

6 (B) efficient use of the electricity grid
7 through—

8 (i) peak load reduction; or

9 (ii) avoided investments in traditional
10 grid infrastructure;

11 (2) to increase the commercial viability of long-
12 duration energy storage technologies;

13 (3)(A) to identify the range of services that
14 long-duration energy storage technologies can pro-
15 vide to the electricity grid; and

16 (B) to the maximum extent practicable, to
17 quantify the value of those services;

18 (4) to investigate challenges to the greater de-
19 ployment of long-duration energy storage tech-
20 nologies;

21 (5) to identify and develop a range of tech-
22 nology types; and

23 (6) to improve the integration of energy storage
24 and the grid.

1 (d) SELECTION OF PROJECTS.—To the maximum ex-
2 tent practicable, in selecting demonstration projects to
3 participate in the Initiative, the Director of ARPA-E
4 shall—

5 (1) ensure a range of technology types;

6 (2) ensure regional diversity among projects, in-
7 cluding appropriate representation of rural areas;

8 (3) consider microgrid, islanded, or off-grid ap-
9 plications; and

10 (4) ensure that any project selected is designed
11 to achieve one or more of the goals described in sub-
12 section (c).

13 (e) COOPERATION WITH ELECTRIC UTILITIES.—A
14 demonstration project selected to participate in the Initia-
15 tive may be carried out in cooperation with the electric
16 utility that owns the grid facilities in the electricity control
17 area in which the demonstration project is carried out.

18 (f) JOINT PROGRAM.—

19 (1) ESTABLISHMENT.—As part of the Initia-
20 tive, the Director of ARPA-E, in consultation with
21 the Director of ESTCP, shall establish within the
22 Department of Energy a joint program to carry out
23 projects—

1 (A) to demonstrate promising long-dura-
2 tion energy storage technologies at different
3 scales; and

4 (B) to help new, innovative long-duration
5 energy storage technologies become commer-
6 cially viable.

7 (2) MEMORANDUM OF UNDERSTANDING.—Not
8 later than 200 days after the date of enactment of
9 this Act, the Director of ARPA-E shall enter into
10 a memorandum of understanding with the Director
11 of ESTCP to jointly administer the Joint Program.

12 (3) INFRASTRUCTURE.—In carrying out the
13 Joint Program, the Directors shall—

14 (A) use existing test-bed infrastructure
15 at—

16 (i) Department of Energy facilities;

17 and

18 (ii) Department of Defense installa-
19 tions; and

20 (B) develop new infrastructure for identi-
21 fied projects, if appropriate.

22 (4) GOALS AND METRICS.—The Directors shall
23 develop goals and metrics for technological progress
24 under the Joint Program consistent with energy re-
25 silience and energy security policies.

1 (5) SELECTION OF PROJECTS.—

2 (A) IN GENERAL.—To the maximum ex-
3 tent practicable, in selecting projects to partici-
4 pate in the Joint Program, the Directors
5 shall—

6 (i) ensure that projects are carried
7 out under conditions that represent a vari-
8 ety of environments with different physical
9 conditions and market constraints; and

10 (ii) ensure an appropriate balance
11 of—

12 (I) larger, higher-cost projects;

13 and

14 (II) smaller, lower-cost projects.

15 (B) PRIORITY.—In carrying out the Joint
16 Program, the Directors shall give priority to
17 demonstration projects that—

18 (i) make available to the public key
19 engineering and field data that will accel-
20 erate deployment of long-duration energy
21 storage technologies; and

22 (ii) will be carried out in the field.

23 (6) STATES AND PRIVATE SECTOR ENTITIES.—

24 In carrying out the Joint Program, the Directors
25 shall encourage—

1 (A) States to become laboratories of inno-
2 vation in the development of long-duration en-
3 ergy storage technologies; and

4 (B) collaboration between participants in
5 the Joint Program, States, and other appro-
6 priate private sector entities.

7 (g) AUTHORIZATION OF APPROPRIATIONS.—There
8 are authorized to be appropriated to carry out the Initia-
9 tive—

10 (1) \$20,000,000 for fiscal year 2021;

11 (2) \$40,000,000 for fiscal year 2022; and

12 (3) \$60,000,000 for each of fiscal years 2023
13 through 2025.

14 **SEC. 2134. AUTHORIZATION OF APPROPRIATIONS FOR THE**
15 **DAYS PROGRAM OF THE ADVANCED RE-**
16 **SEARCH PROJECTS AGENCY-ENERGY.**

17 Section 5012(o) of the America COMPETES Act (42
18 U.S.C. 16538(o)) is amended—

19 (1) in paragraph (2)—

20 (A) by redesignating subparagraphs (A)
21 through (E) as clauses (i) through (v), respec-
22 tively, and indenting appropriately;

23 (B) by striking the paragraph designation
24 and heading and all that follows through “para-
25 graphs (4) and (5)” in the matter preceding

1 clause (i) (as so redesignated) and inserting the
2 following:

3 “(2) AUTHORIZATION OF APPROPRIATIONS.—

4 “(A) IN GENERAL.—Subject to paragraph
5 (4)”;

6 (C) by inserting after clause (v) (as so re-
7 designated) the following:

8 “(B) DAYS PROGRAM.—There is author-
9 ized to be appropriated to carry out the Dura-
10 tion Addition to electricitY Storage program
11 (also known as the ‘DAYS program’) of ARPA-
12 E \$60,000,000 for each of fiscal years 2021
13 through 2025.”;

14 (2) in paragraph (4), in the matter preceding
15 subparagraph (A), by striking “paragraph (2)” and
16 inserting “paragraph (2)(A)”.

