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:

PART III—JOINT LONG-TERM STORAGE

SEC. 2131. SHORT TITLE.
This part may be cited as the “Joint Long-Term Storage Act of 2020”.

SEC. 2132. PURPOSES.
The purposes of this part are—
(1) to facilitate the development of long-duration energy storage technologies;
(2) to increase the commercial viability of long-duration energy storage technologies; and
(3) to increase the energy resilience and energy security and national security of the United States through the use of long-duration energy storage technologies.

SEC. 2133. LONG-DURATION ENERGY STORAGE DEMONSTRATION INITIATIVE.
(a) DEFINITIONS.—In this section:
(1) **DIRECTOR OF ARPA–E.**—The term “Director of ARPA–E” means the Secretary of Energy, acting through the Director of the Advanced Research Projects Agency–Energy.

(2) **DIRECTOR OF ESTCP.**—The term “Director of ESTCP” means the Secretary of Defense, acting through the Director of the Environmental Security Technology Certification Program of the Department of Defense.

(3) **DIRECTORS.**—The term “Directors” means the Director of ARPA–E and the Director of ESTCP, acting jointly.

(4) **INITIATIVE.**—The term “Initiative” means the demonstration initiative established under subsection (b).

(5) **JOINT PROGRAM.**—The term “Joint Program” means the joint program established under subsection (f).

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

(c) **GOALS.**—The goals of the Initiative shall be—
(1) to demonstrate the potential benefits of long-duration energy storage to—

(A) the resilience of the electricity grid, including the security of critical infrastructure; and

(B) efficient use of the electricity grid through—

(i) peak load reduction; or

(ii) avoided investments in traditional grid infrastructure;

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

(3)(A) to identify the range of services that long-duration energy storage technologies can provide to the electricity grid; and

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

(4) to investigate challenges to the greater deployment of long-duration energy storage technologies;

(5) to identify and develop a range of technology types; and

(6) to improve the integration of energy storage and the grid.
(d) Selection of Projects.—To the maximum extent practicable, in selecting demonstration projects to participate in the Initiative, the Director of ARPA–E shall—

(1) ensure a range of technology types;

(2) ensure regional diversity among projects, including appropriate representation of rural areas;

(3) consider microgrid, islanded, or off-grid applications; and

(4) ensure that any project selected is designed to achieve one or more of the goals described in subsection (c).

(e) Cooperation with Electric Utilities.—A demonstration project selected to participate in the Initiative may be carried out in cooperation with the electric utility that owns the grid facilities in the electricity control area in which the demonstration project is carried out.

(f) Joint Program.—

(1) Establishment.—As part of the Initiative, the Director of ARPA–E, in consultation with the Director of ESTCP, shall establish within the Department of Energy a joint program to carry out projects—
(A) to demonstrate promising long-duration energy storage technologies at different scales; and

(B) to help new, innovative long-duration energy storage technologies become commercially viable.

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

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

(A) use existing test-bed infrastructure at—

(i) Department of Energy facilities; and

(ii) Department of Defense installations; and

(B) develop new infrastructure for identified projects, if appropriate.

(4) GOALS AND METRICS.—The Directors shall develop goals and metrics for technological progress under the Joint Program consistent with energy resilience and energy security policies.
(5) SELECTION OF PROJECTS.—

(A) IN GENERAL.—To the maximum extent practicable, in selecting projects to participate in the Joint Program, the Directors shall—

(i) ensure that projects are carried out under conditions that represent a variety of environments with different physical conditions and market constraints; and

(ii) ensure an appropriate balance of—

(I) larger, higher-cost projects; and

(II) smaller, lower-cost projects.

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

(i) make available to the public key engineering and field data that will accelerate deployment of long-duration energy storage technologies; and

(ii) will be carried out in the field.

(6) STATES AND PRIVATE SECTOR ENTITIES.—

In carrying out the Joint Program, the Directors shall encourage—
(A) States to become laboratories of innovation in the development of long-duration energy storage technologies; and

(B) collaboration between participants in the Joint Program, States, and other appropriate private sector entities.

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out the Initiative—

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

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

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

SEC. 2134. AUTHORIZATION OF APPROPRIATIONS FOR THE DAYS PROGRAM OF THE ADVANCED RESEARCH PROJECTS AGENCY–ENERGY.

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

(1) in paragraph (2)—

(A) by redesignating subparagraphs (A) through (E) as clauses (i) through (v), respectively, and indenting appropriately;

(B) by striking the paragraph designation and heading and all that follows through “paragraphs (4) and (5)” in the matter preceding
clause (i) (as so redesignated) and inserting the following:

“(2) AUTHORIZATION OF APPROPRIATIONS.—

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

(C) by inserting after clause (v) (as so redesignated) the following:

“(B) DAYS PROGRAM.—There is authorized to be appropriated to carry out the Duration Addition to electricity Storage program (also known as the ‘DAYS program’) of ARPA–E $60,000,000 for each of fiscal years 2021 through 2025.”; and

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

×