AMENDMENT TO
RULES COMMITTEE PRINT 116–54
OFFERED BY MR. FOSTER OF ILLINOIS

In section 33114(b), strike paragraph (2) and insert the following:

(2) ADDITIONAL REQUIREMENTS.—In establishing the program under paragraph (1), the Secretary shall—

(A) identify and coordinate across all relevant program offices throughout the Department of Energy key areas of existing and future research with respect to a portfolio of technologies and approaches;

(B) adopt long-term cost, performance, and demonstration targets for different types of energy storage systems and for use in a variety of regions, including rural areas;

(C) incorporate considerations of sustainability, sourcing, recycling, reuse, and disposal of materials, including critical elements, in the design of energy storage systems;

(D) identify energy storage duration needs;
(E) analyze the need for various types of energy storage to improve electric grid resilience and reliability; and

(F) support research and development of advanced manufacturing technologies that have the potential to improve United States competitiveness in energy storage manufacturing.

(3) ESTABLISHMENT.—

(A) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish within the Office of Electricity of the Department of Energy a research, development, and demonstration program of grid-scale energy storage systems, in accordance with this subsection.

(B) GOALS, PRIORITIES, COST TARGETS.—The Secretary shall develop goals, priorities, and cost targets for the program.

(4) STRATEGIC PLAN.—

(A) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and
Technology of the House of Representatives a 10-year strategic plan for the program.

(B) CONTENTS.—The strategic plan submitted under subparagraph (A) shall—

(i) identify Department of Energy programs that—

(I) support the research and development activities described in paragraph (5) and the demonstration projects under paragraph (3) under subsection (e); and

(II)(aa) do not support the activities or projects described in subclause (I); but

(bb) are important to the development of grid-scale energy storage systems and the mission of the Office of Electricity of the Department of Energy, as determined by the Secretary; and

(ii) include expected timelines for—

(I) the accomplishment of relevant objectives under current programs of the Department of Energy
relating to grid-scale energy storage systems; and

(II) the commencement of any new initiatives within the Department of Energy relating to grid-scale energy storage systems to accomplish those objectives.

(C) UPDATES TO PLAN.—Not less frequently than once every 2 years, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives an updated 10-year strategic plan, which shall identify, and provide a justification for, any major deviation from a previous strategic plan submitted under this paragraph.

(5) RESEARCH AND DEVELOPMENT.—In carrying out the program, the Secretary shall focus research and development activities on developing cost effective energy storage systems that—

(A)(i) to balance day-scale needs, are capable of highly flexible power output for not less than 6 hours; and

(ii) have a lifetime of—
(I) not less than 8,000 cycles of dis-
charge at full output; and

(II) 20 years of operation;

(B)(i) can provide power to the electric
grid for durations of approximately 10 to 100
hours; and

(ii) have a lifetime of—

(I) not less than 1,500 cycles of dis-
charge at full output; and

(II) 20 years of operation; and

(C) can store energy over several months
and address seasonal scale variations in supply
and demand.

(6) COST TARGETS.—Cost targets developed by
the Secretary under paragraph (3)(B) shall—

(A) be for energy storage costs across all
types of energy storage technology; and

(B) include technology costs, installation
costs, balance of services costs, and soft costs.

(7) TESTING AND VALIDATION.—The Secretary
shall support the standardized testing and validation
of energy storage systems under the program
through collaboration with 1 or more National Lab-
oratories, including the development of methodolo-
gies to independently validate energy storage tech-
nologies by performance of energy storage systems on the electric grid, including when appropriate, testing of application-driven charge and discharge protocols.

(8) TARGET UPDATES; SUBTARGETS.—Not less frequently than once every 5 years during the 10-year period beginning on the date of enactment of this section, the Secretary shall—

(A) revise the cost targets developed under paragraph (3)(B) to be more stringent, based on—

(i) a technology-neutral approach that considers all types of energy storage deployment scenarios, including individual technologies, technology combination use profiles, and integrated control system applications;

(ii) input from a variety of stakeholders;

(iii) the inclusion and use of existing infrastructure; and

(iv) the ability to optimize the integration of intermittent renewable energy generation technology and distributed energy resources; and
(B) establish cost subtargets for technologies and applications relating to the energy storage systems described in paragraph (5), taking into consideration—

(i) electricity market prices; and

(ii) the goal of being cost-competitive in specific markets for electric grid products and services.

In section 33114(e), add at the end the following:

(3) Demonstration projects.—

(A) In general.—Not later than September 30, 2023, under the program, the Secretary shall, to the maximum extent practicable, enter into agreements to carry out not more than 5 grid-scale energy storage system demonstration projects.

(B) Objectives.—Each demonstration project carried out under subparagraph (A) shall be designed to further the development of the energy storage systems described in subsection (b)(5).