

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

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

1 (2) ADDITIONAL REQUIREMENTS.—In estab-
2 lishing the program under paragraph (1), the Sec-
3 retary shall—

4 (A) identify and coordinate across all rel-
5 evant program offices throughout the Depart-
6 ment of Energy key areas of existing and future
7 research with respect to a portfolio of tech-
8 nologies and approaches;

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

13 (C) incorporate considerations of sustain-
14 ability, sourcing, recycling, reuse, and disposal
15 of materials, including critical elements, in the
16 design of energy storage systems;

17 (D) identify energy storage duration needs;

1 (E) analyze the need for various types of
2 energy storage to improve electric grid resil-
3 ience and reliability; and

4 (F) support research and development of
5 advanced manufacturing technologies that have
6 the potential to improve United States competi-
7 tiveness in energy storage manufacturing.

8 (3) ESTABLISHMENT.—

9 (A) IN GENERAL.—Not later than 180
10 days after the date of enactment of this Act,
11 the Secretary shall establish within the Office of
12 Electricity of the Department of Energy a re-
13 search, development, and demonstration pro-
14 gram of grid-scale energy storage systems, in
15 accordance with this subsection.

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

19 (4) STRATEGIC PLAN.—

20 (A) IN GENERAL.—Not later than 180
21 days after the date of enactment of this section,
22 the Secretary shall submit to the Committee on
23 Energy and Natural Resources of the Senate
24 and the Committee on Science, Space, and

1 Technology of the House of Representatives a
2 10-year strategic plan for the program.

3 (B) CONTENTS.—The strategic plan sub-
4 mitted under subparagraph (A) shall—

5 (i) identify Department of Energy
6 programs that—

7 (I) support the research and de-
8 velopment activities described in para-
9 graph (5) and the demonstration
10 projects under paragraph (3) under
11 subsection (e); and

12 (II)(aa) do not support the ac-
13 tivities or projects described in sub-
14 clause (I); but

15 (bb) are important to the devel-
16 opment of grid-scale energy storage
17 systems and the mission of the Office
18 of Electricity of the Department of
19 Energy, as determined by the Sec-
20 retary; and

21 (ii) include expected timelines for—

22 (I) the accomplishment of rel-
23 evant objectives under current pro-
24 grams of the Department of Energy

1 relating to grid-scale energy storage
2 systems; and

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

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

18 (5) RESEARCH AND DEVELOPMENT.—In car-
19 rying out the program, the Secretary shall focus re-
20 search and development activities on developing cost
21 effective energy storage systems that—

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

25 (ii) have a lifetime of—

1 (I) not less than 8,000 cycles of dis-
2 charge at full output; and

3 (II) 20 years of operation;

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

7 (ii) have a lifetime of—

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

10 (II) 20 years of operation; and

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

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

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

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

20 (7) TESTING AND VALIDATION.—The Secretary
21 shall support the standardized testing and validation
22 of energy storage systems under the program
23 through collaboration with 1 or more National Lab-
24 oratories, including the development of methodolo-
25 gies to independently validate energy storage tech-

1 nologies by performance of energy storage systems
2 on the electric grid, including when appropriate,
3 testing of application-driven charge and discharge
4 protocols.

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

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

12 (i) a technology-neutral approach that
13 considers all types of energy storage de-
14 ployment scenarios, including individual
15 technologies, technology combination use
16 profiles, and integrated control system ap-
17 plications;

18 (ii) input from a variety of stake-
19 holders;

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

22 (iv) the ability to optimize the integra-
23 tion of intermittent renewable energy gen-
24 eration technology and distributed energy
25 resources; and

1 (B) establish cost subtargets for tech-
2 nologies and applications relating to the energy
3 storage systems described in paragraph (5),
4 taking into consideration—

5 (i) electricity market prices; and

6 (ii) the goal of being cost-competitive
7 in specific markets for electric grid prod-
8 ucts and services.

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

9 (3) DEMONSTRATION PROJECTS.—

10 (A) IN GENERAL.—Not later than Sep-
11 tember 30, 2023, under the program, the Sec-
12 retary shall, to the maximum extent practicable,
13 enter into agreements to carry out not more
14 than 5 grid-scale energy storage system dem-
15 onstration projects.

16 (B) OBJECTIVES.—Each demonstration
17 project carried out under subparagraph (A)
18 shall be designed to further the development of
19 the energy storage systems described in sub-
20 section (b)(5).

