

# Union Calendar No. 404

116TH CONGRESS  
2D SESSION

# H. R. 4447

**[Report No. 116–504, Part I]**

To establish an energy storage and microgrid grant and technical assistance program.

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## IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 20, 2019

Mr. O'HALLERAN (for himself, Mr. MULLIN, Mr. LAMB, and Mr. NORMAN) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committee on Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

SEPTEMBER 15, 2020

Additional sponsors: Mr. FITZPATRICK, Mrs. BROOKS of Indiana, Mr. WELCH, Mr. COLE, Ms. SPANBERGER, and Ms. KUSTER of New Hampshire

SEPTEMBER 15, 2020

Reported from the Committee on Energy and Commerce with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]

SEPTEMBER 15, 2020

Committee on Science, Space, and Technology discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed

[For text of introduced bill, see copy of bill as introduced on September 20, 2019]

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# **A BILL**

To establish an energy storage and microgrid grant and technical assistance program.

1       *Be it enacted by the Senate and House of Representa-*  
 2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       *This Act may be cited as the “Expanding Access to*  
 5       *Sustainable Energy Act of 2019”.*

6       **SEC. 2. DEFINITIONS.**

7       (a) *DEFINITIONS.—In this Act:*

8               (1) *ELIGIBLE ENTITY.—The term “eligible enti-*  
 9       *ty” means—*

10                       (A) *a rural electric cooperative; or*

11                       (B) *a nonprofit organization working with*  
 12       *at least 6 rural electric cooperatives.*

13               (2) *ENERGY STORAGE.—The term “energy stor-*  
 14       *age” means the use of equipment or facilities relating*  
 15       *to the electric grid that are capable of absorbing and*  
 16       *converting energy, as applicable, storing the energy*  
 17       *for a period of time, and dispatching the energy,*  
 18       *that—*

19                       (A) *use mechanical, electrochemical, bio-*  
 20       *chemical, or thermal processes, to convert and*  
 21       *store energy that was generated at an earlier*  
 22       *time for use at a later time;*

23                       (B) *use mechanical, electrochemical, bio-*  
 24       *chemical, or thermal processes to convert and*  
 25       *store energy generated from mechanical processes*

1           *that would otherwise be wasted for delivery at a*  
2           *later time; or*

3                     *(C) convert and store energy in an electric,*  
4                     *thermal, or gaseous state for direct use for heat-*  
5                     *ing or cooling at a later time in a manner that*  
6                     *avoids the need to use electricity or other fuel*  
7                     *sources at that later time, as is offered by grid-*  
8                     *enabled water heaters.*

9           *(3) ISLAND.—The term “island mode” means a*  
10           *mode in which a distributed generator or energy stor-*  
11           *age device continues to power a location in the ab-*  
12           *sence of electric power from the primary source.*

13                    *(4) MICROGRID.—The term “microgrid” means*  
14                    *an interconnected system of loads and distributed en-*  
15                    *ergy resources, including generators and energy stor-*  
16                    *age devices, within clearly defined electrical bound-*  
17                    *aries that—*

18                            *(A) acts as a single controllable entity with*  
19                            *respect to the electric grid; and*

20                            *(B) can connect to, and disconnect from, the*  
21                            *electric grid to operate in both grid-connected*  
22                            *mode and island mode.*

23                    *(5) RENEWABLE ENERGY SOURCE.—The term*  
24                    *“renewable energy source” has the meaning given the*

1        *term in section 609(a) of the Public Utility Regu-*  
 2        *latory Policies Act of 1978 (7 U.S.C. 918c(a)).*

3                (6) *RURAL ELECTRIC COOPERATIVE.*—*The term*  
 4        *“rural electric cooperative” means an electric coopera-*  
 5        *tive (as defined in section 3 of the Federal Power Act*  
 6        *(16 U.S.C. 796)) that sells electric energy to persons*  
 7        *in rural areas.*

8                (7) *SECRETARY.*—*The term “Secretary” means*  
 9        *the Secretary of Energy.*

10    **SEC. 3. ENERGY STORAGE AND MICROGRID ASSISTANCE**  
 11                **PROGRAM.**

12        (a) *IN GENERAL.*—*Not later than 180 days after the*  
 13        *date of enactment of this Act, the Secretary shall establish*  
 14        *a program under which the Secretary shall—*

15                (1) *provide grants to eligible entities under sub-*  
 16        *section (c);*

17                (2) *provide technical assistance to eligible enti-*  
 18        *ties under subsection (d); and*

19                (3) *disseminate information to eligible entities*  
 20        *on—*

21                (A) *the activities described in subsections*  
 22        *(c)(1) and (d); and*

23                (B) *potential and existing energy storage*  
 24        *and microgrid projects.*

1       (b) *COOPERATIVE AGREEMENT.*—*The Secretary may*  
2 *enter into a cooperative agreement with an eligible entity*  
3 *to carry out subsection (a).*

4       (c) *GRANTS.*—

5           (1) *IN GENERAL.*—*The Secretary shall award*  
6 *grants to eligible entities for identifying, evaluating,*  
7 *designing, and demonstrating energy storage and*  
8 *microgrid projects that utilize energy from renewable*  
9 *energy sources.*

10          (2) *APPLICATION.*—*To be eligible to receive a*  
11 *grant under paragraph (1), an eligible entity shall*  
12 *submit to the Secretary an application at such time,*  
13 *in such manner, and containing such information as*  
14 *the Secretary may require.*

15          (3) *USE OF GRANT.*—*An eligible entity that re-*  
16 *ceives a grant under paragraph (1)—*

17           (A) *shall use the grant—*

18               (i) *to conduct feasibility studies to as-*  
19 *sess the potential for implementation or im-*  
20 *provement of energy storage or microgrid*  
21 *projects;*

22               (ii) *to analyze and implement strate-*  
23 *gies to overcome barriers to energy storage*  
24 *or microgrid project implementation, in-*

cluding financial, contracting, siting, and  
permitting barriers;

(iii) to conduct detailed engineering of  
energy storage or microgrid projects;

(iv) to perform a cost-benefit analysis  
with respect to an energy storage or  
microgrid project;

(v) to plan for both the short- and  
long-term inclusion of energy storage or  
microgrid projects into the future develop-  
ment plans of the eligible entity; or

(vi) to purchase and install necessary  
equipment, materials, and supplies for dem-  
onstration of emerging technologies; and

(B) may use the grant to obtain technical  
assistance from experts in carrying out the ac-  
tivities described in subparagraph (A).

(4) *CONDITION.*—As a condition of receiving a  
grant under paragraph (1), an eligible entity shall—

(A) implement a public awareness cam-  
paign, in coordination with the Secretary, about  
the project implemented under the grant in the  
community in which the eligible entity is lo-  
cated;

1           (B) submit to the Secretary, and make  
2           available to the public, a report that describes—

3           (i) any energy cost savings and envi-  
4           ronmental benefits achieved under the  
5           project; and

6           (ii) the results of the project, including  
7           quantitative assessments to the extent prac-  
8           ticable, associated with each activity de-  
9           scribed in paragraph (3)(A); and

10          (C) create and disseminate tools and re-  
11          sources that will benefit other rural electric co-  
12          operatives, which may include cost calculators,  
13          guidebooks, handbooks, templates, and training  
14          courses.

15          (5) *COST-SHARE*.—Activities under this sub-  
16          section shall be subject to the cost-sharing require-  
17          ments of section 988 of the Energy Policy Act of 2005  
18          (42 U.S.C. 16352).

19          (d) *TECHNICAL ASSISTANCE*.—

20               (1) *IN GENERAL*.—In carrying out the program  
21          established under subsection (a), the Secretary shall  
22          provide eligible entities with technical assistance re-  
23          lating to—

24               (A) identifying opportunities for energy  
25          storage and microgrid projects;



1                   (B) understanding the technical and eco-  
 2                   nomic characteristics of energy storage or  
 3                   microgrid projects;

4                   (C) understanding financing alternatives;

5                   (D) permitting and siting issues;

6                   (E) obtaining case studies of similar and  
 7                   successful energy storage or microgrid projects;

8                   (F) reviewing and obtaining computer soft-  
 9                   ware for assessment, design, and operation and  
 10                  maintenance of energy storage or microgrid sys-  
 11                  tems; and

12                  (G) understanding and utilizing the reli-  
 13                  ability and resiliency benefits of energy storage  
 14                  and microgrid projects.

15               (2) *EXTERNAL CONTRACTS.*—In carrying out  
 16               paragraph (1), the Secretary may enter into contracts  
 17               with third-party experts, including engineering, fi-  
 18               nance, and insurance experts, to provide technical as-  
 19               sistance to eligible entities relating to the activities  
 20               described in such paragraph, or other relevant activi-  
 21               ties, as determined by the Secretary.

22 **SEC. 4. AUTHORIZATION OF APPROPRIATIONS.**

23               (a) *IN GENERAL.*—There is authorized to be appro-  
 24               priated to carry out this Act \$5,000,000 for each of fiscal  
 25               years 2021 through 2025.

1        *(b) ADMINISTRATIVE COSTS.—Not more than 5 per-*  
2 *cent of the amount appropriated under subsection (a) for*  
3 *each fiscal year shall be used for administrative expenses.*



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