

117TH CONGRESS
1ST SESSION

S. 1432

To require the Secretary of Energy to establish an electric grid resilience grant program and an electric grid resilience research and development program.

IN THE SENATE OF THE UNITED STATES

APRIL 28, 2021

Mr. CORNYN (for himself and Mr. PADILLA) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To require the Secretary of Energy to establish an electric grid resilience grant program and an electric grid resilience research and development 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 “Preventing Outages
5 With Enhanced Resilience and Operations Nationwide Act
6 of 2021” or the “POWER ON Act of 2021”.

7 **SEC. 2. ELECTRIC GRID RESILIENCE GRANTS.**

8 (a) DEFINITIONS.—In this section:

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

3 (A) an electric grid operator;

4 (B) an electricity generator;

5 (C) a transmission owner or operator;

6 (D) a distribution provider;

7 (E) a fuel supplier; and

8 (F) any other relevant entity, as deter-
9 mined by the Secretary.

10 (2) EXTREME WEATHER.—

11 (A) IN GENERAL.—The term “extreme
12 weather” means a weather phenomenon that—

13 (i) occurs outside of the historical fre-
14 quency prior to 1990; or

15 (ii) is unexpected, unusual, severe, or
16 unseasonal.

17 (B) INCLUSIONS.—The term “extreme
18 weather” includes—

19 (i) a tornado;

20 (ii) a thunderstorm;

21 (iii) an ice storm;

22 (iv) a heat wave;

23 (v) flooding;

24 (vi) drought;

25 (vii) high winds; and

1 (viii) mudslides.

2 (3) INDIAN TRIBE.—The term “Indian Tribe”
3 has the meaning given the term in section 4 of the
4 Indian Self-Determination and Education Assistance
5 Act (25 U.S.C. 5304).

6 (4) RESILIENCE EVENT.—The term “resilience
7 event” means an event in which, due to extreme
8 weather, a wildfire, or any other natural disaster,
9 operations of the electric grid are disrupted, preven-
10 tively shut off, or cannot operate safely.

11 (5) SECRETARY.—The term “Secretary” means
12 the Secretary of Energy.

13 (6) STATE.—The term “State” means—

14 (A) a State;

15 (B) the District of Columbia; and

16 (C) any territory of the United States.

17 (b) ESTABLISHMENT.—

18 (1) IN GENERAL.—Not later than 180 days
19 after the date of enactment of this Act, the Sec-
20 retary shall establish an electric grid resilience pro-
21 gram under which the Secretary shall provide grants
22 to States and Indian Tribes to award grants to eligi-
23 ble entities to carry out projects that enhance the
24 physical resilience of the electric grid.

25 (2) ANNUAL APPLICATION.—

1 (A) IN GENERAL.—To be eligible to receive
2 a grant under this subsection for a fiscal year,
3 a State or Indian Tribe shall submit to the Sec-
4 retary an application for that fiscal year that
5 describes the criteria and methods that will be
6 used by the State or Indian Tribe to award
7 electric grid resilience grants to eligible entities.

8 (B) REQUIREMENT.—The Secretary shall
9 use amounts appropriated under subsection (f)
10 for a fiscal year to provide grants under this
11 subsection only to States and Indian Tribes
12 that have submitted an application under sub-
13 paragraph (A) for that fiscal year.

14 (3) DISTRIBUTION OF FUNDS.—

15 (A) IN GENERAL.—The Secretary shall
16 provide grants to States and Indian Tribes
17 under this subsection based on a formula deter-
18 mined by the Secretary, in accordance with sub-
19 paragraph (B).

20 (B) REQUIREMENT.—The formula referred
21 to in subparagraph (A) shall be based on the
22 following factors:

- 23 (i) The total population of the State
24 or Indian Tribe.

1 (ii) The probability of resilience events
2 in the State or on the land of the Indian
3 Tribe during the previous 10 years, as de-
4 termined based on the number of federally
5 declared disasters or emergencies in the
6 State or on the land of the Indian Tribe,
7 as applicable, including—

8 (I) disasters for which Fire Man-
9 agement Assistance Grants are pro-
10 vided under section 420 of the Robert
11 T. Stafford Disaster Relief and Emer-
12 gency Assistance Act (42 U.S.C.
13 5187);

14 (II) major disasters declared by
15 the President under section 401 of
16 that Act (42 U.S.C. 5170);

17 (III) emergencies declared by the
18 President under section 501 of that
19 Act (42 U.S.C. 5191); and

20 (IV) any other federally declared
21 disaster or emergency in the State or
22 on the land of the Indian Tribe.

23 (iii) The number and severity, meas-
24 ured by population and economic impacts,
25 of resilience events experienced by the

1 State or Indian Tribe on or after January
2 1, 2011.

3 (iv) The total amount, on a per capita
4 basis, of public and private expenditures
5 during the previous 10 years to carry out
6 mitigation efforts to reduce the likelihood
7 and consequences of resilience events in
8 the State or on the land of the Indian
9 Tribe, with States or Indian Tribes with
10 higher per capita expenditures receiving
11 additional weight or consideration as com-
12 pared to States or Indian Tribes with
13 lower per capita expenditures.

14 (4) ANNUAL UPDATE OF DATA USED IN DIS-
15 TRIBUTION OF FUNDS.—Beginning 1 year after the
16 date of enactment of this Act, the Secretary shall
17 annually update—

18 (A) all data relating to the factors de-
19 scribed in paragraph (3)(B); and

20 (B) all other data used in distributing
21 grants to States and Indian Tribes under this
22 subsection.

23 (5) MATCHING FUNDS.—A State or Indian
24 Tribe that receives a grant under this subsection

1 shall be required to match not less than 15 percent
2 of the amount of the grant.

3 (6) PLAN REQUIRED.—The Secretary shall en-
4 sure that each grant provided to a State or Indian
5 Tribe under this subsection will—

6 (A) be allocated in accordance with a pub-
7 lished State or Indian Tribe plan that—

8 (i) is adopted by the State or Indian
9 Tribe after notice and a public hearing;
10 and

11 (ii) describes the proposed funding
12 distributions and recipients of the electric
13 grid resilience grants to be provided by the
14 State or Indian Tribe; and

15 (B) be allocated, pursuant to the applicable
16 State or Indian Tribe plan, to eligible entities
17 for projects within the State or on the land of
18 the Indian Tribe, as applicable.

19 (7) ADMINISTRATIVE EXPENSES.—

20 (A) IN GENERAL.—Of any amounts made
21 available to the Secretary to carry out the pro-
22 gram established under paragraph (1) for a fis-
23 cal year, the Secretary may use not more than
24 10 percent for the administrative expenses of
25 carrying out that program.

1 (B) GRANT AMOUNTS.—Not more than 10
 2 percent of the amount of a grant provided by
 3 the Secretary to a State or Indian Tribe under
 4 this subsection may be used for administrative
 5 expenses.

6 (c) USE OF GRANTS.—

7 (1) IN GENERAL.—A grant awarded to an eligi-
 8 ble entity under the electric grid resilience program
 9 established under subsection (b)(1) may be used for
 10 activities, technologies, equipment, and hardening
 11 measures to enable the electric grid to better with-
 12 stand the effects of extreme weather, a wildfire, or
 13 any other natural disaster, including—

14 (A) weatherization technologies and equip-
 15 ment;

16 (B) fire-resistant technologies and fire pre-
 17 vention systems;

18 (C) monitoring technologies;

19 (D) the undergrounding of electrical equip-
 20 ment;

21 (E) utility pole management;

22 (F) the relocation of power lines;

23 (G) vegetation and fuel-load management;

24 (H) the use or construction of distributed
 25 energy resources for enhancing system adaptive

capacity during extreme weather events, including—

- (i) microgrids; and
- (ii) battery-storage subcomponents;
- (I) adaptive protection technologies; and
- (J) advanced modeling technologies.

(2) PROHIBITED USES.—

(A) IN GENERAL.—A grant awarded to an eligible entity under the electric grid resilience program established under subsection (b)(1) may not be used for—

(i) construction of a new—

(I) electric generating facility; or

(II) large-scale battery-storage facility that is not used for enhancing system adaptive capacity during extreme weather events; or

(ii) cybersecurity.

(B) CERTAIN INVESTMENTS ELIGIBLE FOR RECOVERY.—

(i) IN GENERAL.—An eligible entity may not seek cost recovery for the portion of the cost of any system, technology, or equipment that is funded through a grant awarded under the electric grid resilience

1 program established under subsection
2 (b)(1).

3 (ii) SAVINGS PROVISION.—Nothing in
4 this subparagraph prohibits an eligible en-
5 tity from recovering through traditional or
6 incentive-based ratemaking any portion of
7 an investment in a system, technology, or
8 equipment that is not funded by a grant
9 awarded under the electric grid resilience
10 program established under subsection
11 (b)(1).

12 (d) EVALUATION OF FUNDED PROJECTS.—The Sec-
13 retary shall carry out periodic evaluations of—

14 (1) the electric grid resilience program estab-
15 lished under subsection (b)(1); and

16 (2) the projects carried out by eligible entities
17 receiving grants under that program.

18 (e) ANNUAL REPORT TO CONGRESS.—

19 (1) IN GENERAL.—Not later than 1 year after
20 the date of enactment of this Act, and annually
21 thereafter, the Secretary shall submit to Congress a
22 report describing the electric grid resilience program
23 established under subsection (b)(1), including the re-
24 sults of the periodic evaluations carried out under
25 subsection (d).

15 SEC. 3. ELECTRIC GRID RESILIENCE RESEARCH AND DE-
16 VELOPMENT.

(b) GRANTS.—Under the program established under subsection (a), the Secretary shall award competitive

1 grants to eligible entities described in subsection (c) to
 2 conduct research, development, demonstration, and com-
 3 mercial application activities to improve the resilience of
 4 the electric grid by developing technologies and capabili-
 5 ties to withstand and address the current and projected
 6 impact on electric grid infrastructure of—

7 (1) extreme weather (as defined in section
 8 2(a));

9 (2) wildfires; and

10 (3) other natural disasters.

11 (c) ELIGIBLE ENTITIES.—An entity eligible to re-
 12 ceive a grant under subsection (b) is—

13 (1) an institution of higher education, including
 14 a historically Black college or university and a mi-
 15 nority-serving institution;

16 (2) a nonprofit organization;

17 (3) a National Laboratory;

18 (4) a unit of State, local, or Tribal government;

19 (5) an electric utility or electric cooperative;

20 (6) a retail service provider of electricity;

21 (7) a private commercial entity;

22 (8) a partnership or consortium of 2 or more
 23 entities described in any of paragraphs (1) through
 24 (7); and

- 1 (9) any other entity the Secretary determines to
- 2 be appropriate.

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