

117TH CONGRESS
1ST SESSION

S. 1553

To require the Secretary of Energy to submit to Congress an annual report on peaker plants in the United States and to provide financial incentives for replacing peaker plants with technology that receives, stores, and delivers energy generated by renewable energy resources, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 11, 2021

Mrs. GILLIBRAND (for herself and Mr. VAN HOLLEN) introduced the following bill; which was read twice and referred to the Committee on Finance

A BILL

To require the Secretary of Energy to submit to Congress an annual report on peaker plants in the United States and to provide financial incentives for replacing peaker plants with technology that receives, stores, and delivers energy generated by renewable energy resources, and for other purposes.

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 “Promoting Energy Al-

5 ternatives is Key to Emission Reductions Act of 2021”

6 or the “PEAKER Act of 2021”.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) APPROPRIATE COMMITTEES OF CON-
4 GRESS.—The term “appropriate committees of Con-
5 gress” means—

6 (A) the Committee on Finance of the Sen-
7 ate;

8 (B) the Committee on Energy and Natural
9 Resources of the Senate;

10 (C) the Committee on Environment and
11 Public Works of the Senate;

12 (D) the Committee on Ways and Means of
13 the House of Representatives; and

14 (E) the Committee on Energy and Com-
15 merce of the House of Representatives.

16 (2) DISADVANTAGED COMMUNITY.—The term
17 “disadvantaged community” means a community
18 that—

19 (A) is located in an area with a high con-
20 centration of individuals who—

21 (i) are members of low- and moderate-
22 income households (as defined in section
23 570.3 of title 24, Code of Federal Regula-
24 tions (or a successor regulation));

25 (ii) experience high levels of unem-
26 ployment;

1 (iii) face a high rent burden;
 2 (iv) face a high energy burden;
 3 (v) have low levels of home ownership;
 4 (vi) have low levels of educational at-
 5 tainment; or

6 (vii) are members of groups that have
 7 historically experienced discrimination on
 8 the basis of race or ethnicity;

9 (B) is burdened by high cumulative envi-
 10 ronmental pollution or other hazards that can
 11 lead to negative public health effects; or

12 (C) is determined to be a disadvantaged
 13 community, an environmental justice commu-
 14 nity, a climate-burdened community, or an oth-
 15 erwise similarly vulnerable community pursuant
 16 to any Federal or State-level initiative, includ-
 17 ing any relevant mapping initiative.

18 (3) HIGH ENERGY BURDEN.—The term “high
 19 energy burden” means, with respect to a household,
 20 expenditure of the household on residential energy
 21 costs that equals 6 percent or more of the household
 22 income.

23 (4) PEAKER PLANT.—The term “peaker plant”
 24 means a fossil fuel-fired power plant or unit of a
 25 power plant that is run primarily to meet peak elec-

1 tricity demand, as determined by the Secretary, in
 2 coordination with the Administrator of the Environ-
 3 mental Protection Agency and the applicable local
 4 electrical grid operator.

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

7 **SEC. 3. ANNUAL REPORT ON PEAKER PLANTS IN THE**
 8 **UNITED STATES.**

9 (a) IN GENERAL.—Not later than 180 days after the
 10 date of enactment of this Act, and annually thereafter,
 11 the Secretary, in coordination with the Administrator of
 12 the Environmental Protection Agency, the White House
 13 Environmental Justice Advisory Council, the White House
 14 Environmental Justice Interagency Council, the Council
 15 on Environmental Quality, and any other relevant Federal
 16 entity that the Secretary determines to be appropriate,
 17 shall submit to the appropriate committees of Congress
 18 a report that—

19 (1) identifies each peaker plant in the United
 20 States; and

21 (2) for each peaker plant identified under para-
 22 graph (1)—

23 (A) describes the location of the peaker
 24 plant and related socioeconomic and demo-
 25 graphic data for that location, including wheth-

er the peaker plant is located in or adjacent to
a disadvantaged community;

(B) evaluates the quantity of carbon dioxide, nitric oxides, sulfur oxides, fine particulate matter (PM_{2.5}), and methane emitted per unit of electricity generated by the peaker plant;

(C) identifies—

(i) the total number of hours that the peaker plant generates electricity during the year covered by the report;

(ii) the capacity factor of the plant;

(iii) the average number of hours that the peaker plant generates electricity each time that the peaker plant generates electricity; and

(iv) the percentage of the total number of instances in which the peaker plant is started that result in the peaker plant generating electricity for—

(I) not less than 4 hours;

(II) not less than 8 hours; and

(III) not less than 12 hours; and

(D) identifies, for each day on which the 3 air monitors closest to the peaker plant indicate that Federal ozone or particulate matter stand-

ards have been exceeded, the percentage of peak demand met by the peaker plant for the electrical grid load zone served by the peaker plant.

(b) COMMUNITY ENGAGEMENT.—In preparing a report under subsection (a), the Secretary shall initiate and carry out public engagement with residents and stakeholders from disadvantaged communities containing a peaker plant.

SEC. 4. CREDIT FOR GENERATION AND STORAGE OF ENERGY FROM RENEWABLE SOURCES.

(a) IN GENERAL.—Subpart E of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 is amended by inserting after section 48C the following new section:

“SEC. 48D. RENEWABLE ENERGY GENERATION AND STORAGE CREDIT.

“(a) IN GENERAL.—For purposes of section 46, the renewable energy generation and storage credit for any taxable year is an amount equal to 10 percent of the qualified investment for such taxable year with respect to any qualified renewable energy facility.

“(b) QUALIFIED INVESTMENT WITH RESPECT TO QUALIFIED RENEWABLE ENERGY FACILITIES.—

“(1) IN GENERAL.—For purposes of subsection (a), the qualified investment with respect to a quali-

1 fied renewable energy facility for any taxable year is
2 the basis of any qualified property placed in service
3 by the taxpayer during such taxable year which is
4 part of a qualified renewable energy facility.

5 “(2) QUALIFIED PROPERTY.—For purposes of
6 this subsection, the term ‘qualified property’ means
7 property—

8 “(A) which is—

9 “(i) tangible personal property, or

10 “(ii) other tangible property (not in-
11 cluding a building or its structural compo-
12 nents), but only if such property is used as
13 an integral part of the qualified renewable
14 energy facility,

15 “(B) with respect to which depreciation (or
16 amortization in lieu of depreciation) is allow-
17 able,

18 “(C) which is constructed, reconstructed,
19 erected, installed, or acquired by the taxpayer,
20 and

21 “(D) the original use of which commences
22 with the taxpayer.

23 “(3) QUALIFIED RENEWABLE ENERGY FACIL-
24 ITY.—

“(A) IN GENERAL.—Subject to subparagraph (B), the term ‘qualified renewable energy facility’ means a facility which—

“(i) uses solar, wind, low-impact hydroelectric (as certified by the Low Impact Hydropower Institute), geothermal, tidal, or wave energy to generate electricity which will be received and stored by property described in clause (ii),

“(ii) contains property which receives, stores, and delivers electricity described in clause (i), provided that such electricity is—

“(I)(aa) sold by the taxpayer to an unrelated person, or

“(bb) in the case of a facility which is equipped with a metering device which is owned and operated by an unrelated person, sold or consumed by the taxpayer, and

“(II) at a minimum, discharged at such times as a peaker plant within the same electrical grid load zone would operate to meet peak electricity

1 demand (as determined by the grid
 2 operator for such electrical grid), and
 3 “(iii) which is placed in service—

4 “(I) in a disadvantaged commu-
 5 nity which is located within—

6 “(aa) the same census tract
 7 as a peaker plant, or

8 “(bb) a census tract that is
 9 adjacent to a census tract in
 10 which a peaker plant is located,
 11 and

12 “(II) after December 31, 2021.

13 “(B) SPECIAL RULE.—For purposes of
 14 this paragraph, a facility shall not be deemed to
 15 be a qualified renewable energy facility unless
 16 the taxpayer demonstrates, to the satisfaction
 17 of the Secretary, that—

18 “(i) the property described in clause
 19 (i) of subparagraph (A) is co-located with
 20 property described in clause (ii) of such
 21 subparagraph,

22 “(ii) such taxpayer has, with respect
 23 to the property described in clause (ii) of
 24 such subparagraph, entered into a contract
 25 which ensures that such property operates

1 primarily to receive, store, and deliver elec-
 2 tricity from any property described in
 3 clause (i) of such subparagraph, or

4 “(iii) the property described in clause
 5 (ii) of such subparagraph receives elec-
 6 tricity during periods of typically high pro-
 7 duction of electricity, as a percentage of
 8 the grid generation mix, from sources de-
 9 scribed in clause (i) of such subparagraph,
 10 as determined by the grid operator for the
 11 electrical grid.

12 “(c) CERTAIN PROGRESS EXPENDITURE RULES
 13 MADE APPLICABLE.—Rules similar to the rules of sub-
 14 sections (c)(4) and (d) of section 46 (as in effect on the
 15 day before the date of the enactment of the Revenue Rec-
 16 onciliation Act of 1990) shall apply for purposes of sub-
 17 section (a).

18 “(d) DEFINITIONS.—The terms ‘disadvantaged com-
 19 munity’ and ‘peaker plant’ have the same meanings given
 20 such term under section 2 of the PEAKER Act of 2021.”.

21 (b) CONFORMING AMENDMENTS.—

22 (1) Section 46 of the Internal Revenue Code of
 23 1986 is amended—

24 (A) by striking “and” at the end of para-
 25 graph (5);

1 (B) by striking the period at the end of
 2 paragraph (6) and inserting “, and”; and

3 (C) by adding at the end the following new
 4 paragraph:

5 “(7) the renewable energy generation and stor-
 6 age credit.”.

7 (2) Section 49(a)(1)(C) of such Code is amend-
 8 ed—

9 (A) by striking “and” at the end of clause
 10 (iv);

11 (B) by striking the period at the end of
 12 clause (v) and inserting “, and”; and

13 (C) by adding at the end the following new
 14 clause:

15 “(vi) the basis of any qualified prop-
 16 erty which is part of a qualified renewable
 17 energy facility under section 48D.”.

18 (3) Section 50(a)(2)(E) of such Code is amend-
 19 ed by striking “or 48C(b)(2)” and inserting
 20 “48C(b)(2), or 48D(c)”.

21 (4) The table of sections for subpart E of part
 22 IV of subchapter A of chapter 1 of such Code is
 23 amended by inserting after the item relating to sec-
 24 tion 48C the following new item:

“48D. Renewable energy generation and storage credit.”.

1 (c) EFFECTIVE DATE.—The amendments made by
 2 this subsection shall apply to property placed in service
 3 after December 31, 2020, under rules similar to the rules
 4 of section 48(m) of the Internal Revenue Code of 1986
 5 (as in effect on the day before the date of the enactment
 6 of the Revenue Reconciliation Act of 1990).

7 **SEC. 5. RENEWABLE ENERGY GRANT PROGRAM.**

8 (a) DEFINITIONS.—In this section:

9 (1) ELIGIBLE ENTITY.—The term “eligible enti-
 10 ty” means each of the following:

11 (A) A unit of State or local government.

12 (B) A tax-exempt nonprofit organization.

13 (C) A community-owned energy generation
 14 facility or energy storage facility located in a
 15 disadvantaged community.

16 (D) A community-based energy cooperative
 17 or a similar group of individuals within a com-
 18 munity who are pursuing an eligible project de-
 19 scribed in subsection (d).

20 (E) A partnership between—

21 (i) 1 or more of the entities described
 22 in subparagraphs (A) through (D); and

23 (ii)(I) an electric utility; or

24 (II) a private entity.

1 (2) ENERGY STORAGE FACILITY.—The term
2 “energy storage facility” means a facility that re-
3 ceives, stores, and delivers electricity.

4 (3) PROGRAM.—The term “program” means
5 the grant program established under subsection (b).

6 (4) QUALIFYING COMMUNITY ENERGY PRO-
7 POSAL.—The term “qualifying community energy
8 proposal” means a proposal to deploy and implement
9 renewable energy generation, energy storage tech-
10 nology, energy efficiency upgrades, energy demand
11 management strategies, or distributed renewable en-
12 ergy resources that a qualifying community energy
13 study determines can reduce the runtime of an exist-
14 ing or planned peaker plant or otherwise reduce or
15 replace the need for an existing or planned peaker
16 plant.

17 (5) QUALIFYING COMMUNITY ENERGY STUDY.—
18 The term “qualifying community energy study”
19 means a study or assessment that—

20 (A) seeks to identify clean energy strate-
21 gies to reduce the runtime of an existing or
22 planned peaker plant or otherwise reduce or re-
23 place the need for an existing or planned peaker
24 plant, including strategies that involve—

25 (i) renewable energy generation;

- 1 (ii) energy storage technology;
- 2 (iii) energy efficiency upgrades;
- 3 (iv) energy demand management
- 4 strategies; or
- 5 (v) distributed renewable energy de-
- 6 ployment; and

7 (B) is led by or performed in partnership
 8 with the communities directly impacted by pol-
 9 lution from a peaker plant that is located with-
 10 in the same or an adjacent census tract.

11 (6) QUALIFYING ENERGY STORAGE FACILITY.—

12 The term “qualifying energy storage facility” means
 13 an energy storage facility that—

14 (A) is colocated with a qualifying renew-
 15 able energy facility and operates primarily to
 16 receive, store, and deliver renewable energy gen-
 17 erated by that qualifying renewable energy fa-
 18 cility;

19 (B) has entered into a contract with 1 or
 20 more qualifying renewable energy facilities such
 21 that the energy storage system operates pri-
 22 marily to receive, store, and deliver renewable
 23 energy generated by those qualifying renewable
 24 energy facilities; or

1 (C) receives electricity during periods of
 2 typically high production of renewable energy
 3 (as a percentage of the grid generation mix), as
 4 determined by the operator of the applicable
 5 electrical grid.

6 (7) QUALIFYING RENEWABLE ENERGY FACIL-
 7 ITY.—The term “qualifying renewable energy facil-
 8 ity” means a facility that—

9 (A) generates renewable energy; and

10 (B)(i) is colocated with a qualifying energy
 11 storage facility; or

12 (ii) has entered into a contract described in
 13 paragraph (6)(B) with 1 or more qualifying en-
 14 ergy storage facilities.

15 (8) RENEWABLE ENERGY.—The term “renew-
 16 able energy” means electricity that is generated by
 17 or derived from, as applicable—

18 (A) a low-impact hydroelectric facility cer-
 19 tified by the Low Impact Hydropower Institute;

20 (B) solar energy;

21 (C) wind energy;

22 (D) geothermal energy;

23 (E) tidal energy; or

24 (F) wave energy.

1 (b) ESTABLISHMENT.—Not later than 1 year after
2 the date of enactment of this Act, the Secretary shall es-
3 tablish a grant program to assist eligible entities in—

4 (1) carrying out projects for the construction,
5 reconstruction, erection, installation, or acquisition
6 of qualifying renewable energy facilities and quali-
7 fying energy storage facilities;

8 (2) carrying out projects for the implementation
9 of qualifying community energy proposals; and

10 (3) developing and carrying out qualifying com-
11 munity energy studies.

12 (c) APPLICATIONS.—To be eligible to receive a grant
13 under the program, an eligible entity shall submit to the
14 Secretary an application at such time, in such manner,
15 and containing such information as the Secretary may re-
16 quire.

17 (d) ELIGIBLE PROJECTS AND QUALIFYING COMMU-
18 NITY ENERGY STUDIES.—The Secretary may provide a
19 grant under the program for—

20 (1) a project described in subsection (b)(1) only
21 if each qualifying renewable energy facility and
22 qualifying energy storage facility to be constructed,
23 reconstructed, erected, installed, or acquired pursu-
24 ant to the project will—

1 (A) be located in, or provide a direct and
 2 significant benefit to, a disadvantaged commu-
 3 nity that is located within—

4 (i) the same census tract as an exist-
 5 ing or planned peaker plant; or

6 (ii) a census tract that is adjacent to
 7 a census tract in which an existing or
 8 planned peaker plant is or will be located;
 9 and

10 (B) at a minimum, discharge electricity at
 11 such times as a peaker plant within the same
 12 electrical grid load zone would operate to meet
 13 peak electricity demand, as determined by the
 14 operator of the applicable electrical grid;

15 (2) a project described in subsection (b)(2) only
 16 if the qualifying community energy proposal to be
 17 implemented pursuant to the project will be imple-
 18 mented in, or provide a direct and significant benefit
 19 to, a disadvantaged community that is located within
 20 a census tract described in clause (i) or (ii) of para-
 21 graph (1)(A); and

22 (3) the development and carrying out of a
 23 qualifying community energy study only if the quali-
 24 fying community energy study will provide for en-
 25 gagement with, and incorporate feedback from, each

1 disadvantaged community that is located within a
 2 census tract described in clause (i) or (ii) of para-
 3 graph (1)(A).

4 (e) TECHNICAL ASSISTANCE GRANTS.—The Sec-
 5 retary may use amounts appropriated under subsection (i)
 6 to provide grants to eligible entities for the cost of acquir-
 7 ing technical assistance for the preparation and submis-
 8 sion of an application under subsection (c).

9 (f) PRIORITY FOR CERTAIN ELIGIBLE ENTITIES.—
 10 In evaluating applications submitted by eligible entities de-
 11 scribed in subsection (a)(1)(B), the Secretary shall give
 12 priority to applications submitted by local, community-
 13 based organizations or energy cooperatives.

14 (g) COST SHARING.—

15 (1) IN GENERAL.—Except as provided in para-
 16 graph (2), with respect to each project described in
 17 paragraph (1) or (2) of subsection (b) for which a
 18 grant is provided under the program, the maximum
 19 amount provided for the project under the program
 20 shall not exceed 60 percent of the total cost incurred
 21 by the applicable eligible entity for, as applicable—

22 (A) the construction, reconstruction, erec-
 23 tion, installation, or acquisition of the applica-
 24 ble qualifying renewable energy facility or quali-
 25 fying energy storage facility; or

1 (B) the implementation of the applicable
2 qualifying community energy proposal.

3 (2) LOCAL, COMMUNITY-BASED ORGANIZATIONS
4 AND ENERGY COOPERATIVES.—With respect to a
5 project described in paragraph (1) that is carried
6 out by, or for which an application is submitted by,
7 a local, community-based organization or an energy
8 cooperative, the maximum amount provided for the
9 project under the program shall not exceed 80 per-
10 cent of the total cost incurred by the local, commu-
11 nity-based organization or energy cooperative for the
12 activities described in subparagraph (A) or (B) of
13 that paragraph, as applicable.

14 (h) COMMUNITY ENGAGEMENT.—In carrying out this
15 section, the Secretary shall initiate and carry out public
16 engagement, particularly with residents and stakeholders
17 from disadvantaged communities and communities in or
18 adjacent to areas with existing peaker plants identified in
19 a report under section 3(a), to ensure that—

20 (1)(A) the public has input into the formulation
21 of the program; and

22 (B) based on that input, the program best ad-
23 dresses the needs and circumstances of disadvan-
24 tagged communities; and

1 (2) the public has information relating to the
2 program, including—

3 (A) the benefits of, and opportunities for,
4 eligible projects under the program; and

5 (B) the ways in which disadvantaged com-
6 munities can best use the program to address
7 the clean energy goals of those disadvantaged
8 communities.

9 (i) AUTHORIZATION OF APPROPRIATIONS.—There is
10 authorized to be appropriated to the Secretary to carry
11 out the program not more than \$1,000,000,000 for each
12 of fiscal years 2022 through 2032.

○