

110TH CONGRESS
1ST SESSION

S. 1016

To amend the Public Utility Regulatory Policies Act of 1978 to promote energy independence and self-sufficiency by providing for the use of net metering by certain small electric energy generation systems, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 28, 2007

Mr. MENENDEZ introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To amend the Public Utility Regulatory Policies Act of 1978 to promote energy independence and self-sufficiency by providing for the use of net metering by certain small electric energy generation systems, 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 “Solar Opportunity and
5 Local Access Rights Act”.

1 **SEC. 2. NET METERING AND INTERCONNECTION STAND-**
 2 **ARDS.**

3 (a) IN GENERAL.—Section 113 of the Public Utility
 4 Regulatory Policies Act of 1978 (16 U.S.C. 2623) is
 5 amended by adding at the end the following:

6 “(d) NET METERING.—

7 “(1) DEFINITIONS.—In this subsection and
 8 subsection (e):

9 “(A) CUSTOMER-GENERATOR.—The term
 10 ‘customer-generator’ means the owner or oper-
 11 ator of a qualified generation unit.

12 “(B) ELECTRIC GENERATION UNIT.—The
 13 term ‘electric generation unit’ means—

14 “(i) a qualified generation unit; and

15 “(ii) any electric generation unit that
 16 qualifies for net metering under a net me-
 17 tering tariff or rule approved by a State.

18 “(C) LOCAL DISTRIBUTION SYSTEM.—The
 19 term ‘local distribution system’ means any sys-
 20 tem for the distribution of electric energy to the
 21 ultimate consumer of the electricity, whether or
 22 not the owner or operator of the system is a re-
 23 tail electric supplier.

24 “(D) NET METERING.—The term ‘net me-
 25 tering’ means the process of—

1 “(i) measuring the difference between
2 the electricity supplied to a customer-gen-
3 erator and the electricity generated by the
4 customer-generator that is delivered to a
5 local distribution system at the same point
6 of interconnection during an applicable
7 billing period; and

8 “(ii) providing an energy credit to the
9 customer-generator in the form of a kilo-
10 watt-hour credit for each kilowatt-hour of
11 energy produced by the customer-generator
12 from a qualified generation unit.

13 “(E) QUALIFIED GENERATION UNIT.—The
14 term ‘qualified generation unit’ means an elec-
15 tric energy generation unit that—

16 “(i) is a fuel cell or uses as the energy
17 source of the unit solar energy, wind, bio-
18 mass, geothermal energy, anaerobic diges-
19 tion, or landfill gas, or a combination of
20 the any of those sources;

21 “(ii) has a generating capacity of not
22 more than 2,000 kilowatts;

23 “(iii) is located on premises that are
24 owned, operated, leased, or otherwise con-
25 trolled by the customer-generator;

1 “(iv) operates in parallel with the re-
2 tail electric supplier; and

3 “(v) is intended primarily to offset all
4 or part of the requirements of the cus-
5 tomer-generator for electric energy.

6 “(F) RETAIL ELECTRIC SUPPLIER.—The
7 term ‘retail electric supplier’ means any electric
8 utility that sells electric energy to the ultimate
9 consumer of the energy.

10 “(2) ADOPTION.—Not later than 1 year after
11 the date of enactment of this subsection, each State
12 regulatory authority (with respect to each electric
13 utility for which the State regulatory authority has
14 ratemaking authority), and each nonregulated elec-
15 tric utility, shall—

16 “(A) provide public notice and conduct a
17 hearing with respect to the standards estab-
18 lished under paragraph (3); and

19 “(B) on the basis of the hearing, adopt the
20 standard.

21 “(3) ESTABLISHMENT OF NET METERING
22 STANDARD.—

23 “(A) IN GENERAL.—Each retail electric
24 supplier shall offer to arrange (either directly or
25 through a local distribution company or other

1 third party) to make net metering available, on
2 a first-come, first-served basis, to each of the
3 retail customers of the retail electric supplier in
4 accordance with the requirements described in
5 subparagraph (B) and other provisions of this
6 subsection.

7 “(B) REQUIREMENTS.—The requirements
8 referred to in subparagraph (A) are, with re-
9 spect to a retail electric supplier, that—

10 “(i) rates and charges and contract
11 terms and conditions for the sale of electric
12 energy to customer-generators shall be the
13 same as the rates and charges and con-
14 tract terms and conditions that would be
15 applicable if the customer-generator did
16 not own or operate a qualified generation
17 unit and use a net metering system; and

18 “(ii) each retail electric supplier shall
19 notify all of the retail customers of the re-
20 tail electric supplier of the standard estab-
21 lished under this paragraph as soon as
22 practicable after the adoption of the stand-
23 ard.

24 “(4) NET ENERGY MEASUREMENT.—

“(A) IN GENERAL.—Each retail electric supplier shall arrange to provide to customer-generators who qualify for net metering under subsection (b) an electrical energy meter capable of net metering and measuring, to the maximum extent practicable, the flow of electricity to or from the customer, using a single meter and single register.

“(B) IMPRACTICABILITY.—In a case in which it is not practicable to provide a meter to a customer-generator under subparagraph (A), a retail electric supplier (either directly or through a local distribution company or other third party) shall, at the expense of the retail electric supplier, install 1 or more of those electric energy meters for the customer-generators concerned.

“(5) BILLING.—

“(A) IN GENERAL.—Each retail electric supplier subject to subsection (b) shall calculate the electric energy consumption for a customer using a net metering system in accordance with subparagraphs (B) through (D).

“(B) MEASUREMENT OF ELECTRICITY.—
The retail electric supplier shall measure the

1 net electricity produced or consumed during the
2 billing period using the metering installed in ac-
3 cordance with paragraph (4).

4 “(C) BILLING AND CREDITING.—

5 “(i) BILLING.—If the electricity sup-
6 plied by the retail electric supplier exceeds
7 the electricity generated by the customer-
8 generator during the billing period, the
9 customer-generator shall be billed for the
10 net electric energy supplied by the retail
11 electric supplier in accordance with normal
12 billing practices

13 “(ii) CREDITING.—

14 “(I) IN GENERAL.—If electric en-
15 ergy generated by the customer-gener-
16 ator exceeds the electric energy sup-
17 plied by the retail electric supplier
18 during the billing period, the cus-
19 tomer-generator shall be billed for the
20 appropriate customer charges for that
21 billing period and credited for the ex-
22 cess electric energy generated during
23 the billing period, with the credit ap-
24 pearing as a kilowatt-hour credit on
25 the bill for the following billing period.

1 “(II) APPLICATION OF CRED-
 2 ITS.—Any kilowatt-hour credits pro-
 3 vided to a customer-generator under
 4 this clause shall be applied to cus-
 5 tomer-generator electric energy con-
 6 sumption on the following billing pe-
 7 riod bill (except for a billing period
 8 that ends in the next calendar year).

9 “(III) CARRYOVER OF UNUSED
 10 CREDITS.—At the beginning of each
 11 calendar year, any unused kilowatt-
 12 hour credits remaining from the pre-
 13 ceding year will carry over to the new
 14 year.

15 “(D) USE OF TIME-DIFFERENTIATED
 16 RATES.—

17 “(i) IN GENERAL.—Except as pro-
 18 vided in clause (ii), if a customer-generator
 19 is using a meter and retail billing arrange-
 20 ment that has time-differentiated rates—

21 “(I) the kilowatt-hour credit shall
 22 be based on the ratio representing the
 23 difference in retail rates for each
 24 time-of-use rate; or

1 “(II) the credits shall be reflected
2 on the bill of the customer-generator
3 as a monetary credit reflecting retail
4 rates at the time of generation of the
5 electric energy by the customer-gener-
6 ator.

7 “(ii) DIFFERENT TARIFFS OR SERV-
8 ICES.—A retail electric supplier shall offer
9 a customer-generator the choice of a time-
10 differentiated energy tariff rate or a
11 nontime-differentiated energy tariff rate, if
12 the retail electric supplier offers the choice
13 to customers in the same rate class as the
14 customer-generator.

15 “(6) PERCENT LIMITATIONS.—

16 “(A) 4 PERCENT LIMITATION.—The stand-
17 ard established under this subsection shall not
18 apply for a calendar year in the case of a cus-
19 tomer-generator served by a local distribution
20 company if the total generating capacity of all
21 customer-generators with net metering systems
22 served by the local distribution company in the
23 calendar year is equal to or more than 4 per-
24 cent of the capacity necessary to meet the aver-

age forecasted aggregate customer peak demand of the company for the calendar year.

“(B) 2 PERCENT LIMITATION.—The standard established under this subsection shall not apply for a calendar year in the case of a customer-generator served by a local distribution company if the total generating capacity of all customer-generators with net metering systems served by the local distribution company in the calendar year using a single type of qualified generation units (as described in paragraph (1)(D)(i)) is equal to or more than 2 percent of the capacity necessary to meet the average forecasted aggregate customer peak demand of the company for the calendar year.

“(C) RECORDS AND NOTICE.—

“(i) RECORDS.—Each retail electric supplier shall maintain, and make available to the public, records of—

“(I) the total generating capacity of customer-generators of the system of the retail electric supplier that are using net metering; and

“(II) the type of generating systems and energy source used by the

1 electric generating systems used by
2 the customer-generators.

3 “(ii) NOTICE.—Each such retail elec-
4 tric supplier shall notify the State regu-
5 latory authority and the Commission at
6 each time at which the total generating ca-
7 pacity of the customer-generators of the
8 retail electric supplier reaches a level that
9 equals or exceeds—

10 “(I) 75 percent of the limitation
11 specified in subparagraph (B); or

12 “(II) the limitation specified in
13 subparagraph (B).

14 “(7) OWNERSHIP OF CREDITS.—

15 “(A) IN GENERAL.—For purposes of Fed-
16 eral and State laws providing renewable energy
17 credits or greenhouse gas credits, a customer-
18 generator with a qualified generation unit and
19 net metering shall be treated as owning and
20 having title to the renewable energy attributes,
21 renewable energy credits and greenhouse gas
22 emission credits relating to any electricity pro-
23 duced by the qualified generation unit.

24 “(B) RETAIL ELECTRIC SUPPLIERS.—No
25 retail electric supplier shall claim title to or

ownership of any renewable energy attributes,
 renewable energy credits, or greenhouse gas
 emission credits of a customer-generator as a
 result of interconnecting the customer-generator
 or providing or offering the customer-generator
 net metering.

“(8) SAFETY AND PERFORMANCE STAND-
 ARDS.—

“(A) IN GENERAL.—A qualified generation
 unit and net metering system used by a cus-
 tomer-generator shall meet all applicable safety
 and performance and reliability standards es-
 tablished by—

“(i) the national electrical code;

“(ii) the Institute of Electrical and
 Electronics Engineers;

“(iii) Underwriters Laboratories; or

“(iv) the American National Stand-
 ards Institute.

“(B) ADDITIONAL CHARGES.—The Com-
 mission shall, after consultation with State reg-
 ulatory authorities and nonregulated local dis-
 tribution systems and after notice and oppor-
 tunity for comment, prohibit by regulation the
 imposition of additional charges by retail elec-

1 tric suppliers and local distribution systems for
 2 equipment or services for safety or performance
 3 that are in addition to those necessary to meet
 4 the standards and requirements referred to in
 5 subparagraph (A) and subsection (e).

6 “(9) DETERMINATION OF COMPLIANCE.—

7 “(A) IN GENERAL.—Any State regulatory
 8 authority (with respect to each electric utility
 9 for which the authority has ratemaking author-
 10 ity), and each nonregulated electric utility, may
 11 apply to the Commission for a determination
 12 that any State net metering requirement or reg-
 13 ulations complies with this subsection.

14 “(B) ORDERS.—In the absence of a deter-
 15 mination under subparagraph (A), the Commis-
 16 sion, on the motion of the Commission or pur-
 17 suant to the petition of any interested person,
 18 may, after notice and opportunity for a hearing
 19 on the record, issue an order requiring against
 20 any retail electric supplier or local distribution
 21 company to require compliance with this sub-
 22 section.

23 “(C) PENALTIES.—

24 “(i) IN GENERAL.—Any person who
 25 violates this subsection or any order of the

Commission under this subsection shall be subject to a civil penalty in the amount of \$10,000 for each day that the violation continues.

“(ii) ASSESSMENT.—The penalty may be assessed by the Commission, after notice and opportunity for hearing, in the same manner as penalties are assessed under section 31(d) of the Federal Power Act (16 U.S.C. 823b(d)).

“(e) INTERCONNECTION STANDARDS.—

“(1) MODEL STANDARDS.—

“(A) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, the Commission shall publish model standards for the physical connection between local distribution systems and qualified generation units and electric generation units that—

“(i) are qualified generation units (as defined in subsection (d)(1)(D) (other than clause (ii) of subsection (d)(1)(D)); and

“(ii) do not exceed 20,000 kilowatts of capacity.

“(B) PURPOSES.—The model standards shall be designed to—

1 “(i) encourage the use of qualified
2 generation units; and

3 “(ii) ensure the safety and reliability
4 of the qualified generation units and the
5 local distribution systems interconnected
6 with the qualified generation units.

7 “(C) EXPEDITED PROCEDURES.—

8 “(i) IN GENERAL.—The model stand-
9 ards shall have 2 separate expedited proce-
10 dures, including—

11 “(I) a standard for inter-
12 connecting qualified generation units
13 of not more than 15 kilowatts; and

14 “(II) a separate standard that
15 expedites interconnection for qualified
16 generation units of more than 15 kilo-
17 watts but not more than 2,000 kilo-
18 watts.

19 “(ii) BEST PRACTICES.—The expe-
20 dited procedures shall be based on the best
21 practices that have been used in States
22 that have adopted interconnection stand-
23 ards.

24 “(iii) MODEL RULE.—In designing the
25 expedited procedures, the Commission shall

1 consider Interstate Renewable Energy
2 Council Model Rule MR–I2005.

3 “(D) ADOPTION OF STANDARDS.—

4 “(i) IN GENERAL.—Not later than 2
5 years after the date of enactment of this
6 subsection, each State shall—

7 “(I) adopt the model standards
8 established under this paragraph, with
9 or without modification; and

10 “(II) submit the standards to the
11 Commission for approval.

12 “(ii) APPROVAL OF MODIFICATION.—
13 The Commission shall approve a modifica-
14 tion of the model standards only if the
15 Commission determines that the modifica-
16 tion is—

17 “(I) consistent with or superior
18 to the purpose of the standards; and

19 “(II) required by reason of local
20 conditions.

21 “(E) NONAPPROVAL OF STANDARDS FOR A
22 STATE.—If standards have not been approved
23 under this paragraph by the Commission for
24 any State during the 2-year period beginning
25 on the date of enactment of this subsection, the

1 Commission shall, by rule or order, enforce the
 2 model standards of the Commission in the State
 3 until such time as State standards are approved
 4 by the Commission.

5 “(F) UPDATES.—

6 “(i) IN GENERAL.—Not later than 2
 7 years after the date of enactment of this
 8 subsection and after notice and oppor-
 9 tunity for comment, the Commission shall
 10 publish an update of the model standards,
 11 after considering changes in the underlying
 12 standards and technologies.

13 “(ii) AVAILABILITY.—The updates
 14 shall be made available to State regulatory
 15 authorities for the consideration of the au-
 16 thorities.

17 “(2) SAFETY, RELIABILITY, PERFORMANCE,
 18 AND COST.—

19 “(A) IN GENERAL.—The standards under
 20 this subsection shall establish such measures
 21 for the safety and reliability of the affected
 22 equipment and local distribution systems as are
 23 appropriate.

24 “(B) ADMINISTRATION.—The standards
 25 shall—

1 “(i) be consistent with all applicable
2 safety and performance standards estab-
3 lished by—

4 “(I) the national electrical code;

5 “(II) the Institute of Electrical
6 and Electronics Engineers;

7 “(III) Underwriters Laboratories;

8 or

9 “(IV) the American National
10 Standards Institute; and

11 “(ii) impose not more than such min-
12 imum cost and technical burdens to the
13 interconnecting customer generator as the
14 Commission determines, by rule, are prac-
15 ticable.

16 “(3) ADDITIONAL CHARGES.—The model stand-
17 ards under this subsection shall prohibit the imposi-
18 tion of additional charges by local distribution sys-
19 tems for equipment or services for interconnection
20 that are in excess of—

21 “(A) the charges necessary to meet the
22 standards; and

23 “(B) the charges and equipment require-
24 ments identified in the best practices of States
25 with interconnection standards.

1 “(4) RELATIONSHIP TO EXISTING LAW REGARD-
 2 ING INTERCONNECTION.—Nothing in this subsection
 3 affects the application of section 111(d)(15) relating
 4 to interconnection.

5 “(5) CONSUMER-FRIENDLY CONTRACTS.—

6 “(A) IN GENERAL.—The Commission
 7 shall—

8 “(i) promulgate regulations that en-
 9 sure that simplified contracts will be used
 10 for the interconnection of electric energy
 11 by electric energy transmission or local dis-
 12 tribution systems and generating facilities
 13 that have a power production capacity of
 14 not greater than 2,000 kilowatts; and

15 “(ii) consider the best practices for
 16 consumer-friendly contracts that are used
 17 by States or national associations of State
 18 regulators.

19 “(B) LIABILITY OR INSURANCE.—The con-
 20 tracts shall not require liability or other insur-
 21 ance in excess of the liability or insurance that
 22 is typically carried by customer-generators for
 23 general liability.

24 “(6) ENFORCEMENT.—

1 “(A) IN GENERAL.—Any person who vio-
 2 lates this subsection shall be subject to a civil
 3 penalty in the amount of \$10,000 for each day
 4 that the violation continues.

5 “(B) ASSESSMENT.—The penalty may be
 6 assessed by the Commission, after notice and
 7 opportunity for hearing, in the same manner as
 8 penalties are assessed under section 31(d) of
 9 the Federal Power Act (16 U.S.C. 823b(d)).”.

10 (b) CONFORMING AMENDMENT.—Section 1262 of the
 11 Public Utility Holding Company Act of 2005 (42 U.S.C.
 12 16451) is amended by striking paragraph (5) and insert-
 13 ing the following:

14 “(5) ELECTRIC UTILITY COMPANY.—

15 “(A) IN GENERAL.—The term ‘electric
 16 utility company’ means any company that owns
 17 or operates facilities used for the generation,
 18 transmission, or distribution of electric energy
 19 for sale.

20 “(B) EXCLUSION.—The term ‘electric util-
 21 ity company’ does not include an electric gen-
 22 eration unit (as defined in section 113(d) of the
 23 Public Utility Regulatory Policies Act of
 24 1978).”.

1 **SEC. 3. RELATIONSHIP TO STATE LAW.**

2 Section 117(b) of the Public Utility Regulatory Poli-
3 cies Act of 1978 (16 U.S.C. 2627(b)) is amended—

4 (1) by striking “Nothing” and inserting the fol-
5 lowing:

6 “(1) IN GENERAL.—Except as provided in para-
7 graph (2), nothing”; and

8 (2) by adding at the end the following:

9 “(2) NET METERING AND INTERCONNECTION
10 STANDARDS.—

11 “(A) IN GENERAL.—Subject to subpara-
12 graph (B), no State or nonregulated utility may
13 adopt or enforce any standard or requirement
14 concerning net metering or interconnection that
15 restricts access to the electric power trans-
16 mission or local distribution system by qualified
17 generators beyond those standards and require-
18 ments established under section 113.

19 “(B) EQUIVALENT OR GREATER ACCESS.—
20 Nothing in this Act precludes a State from
21 adopting or enforcing incentives or require-
22 ments to encourage qualified generation and net
23 metering that—

24 “(i) are in addition to or equivalent to
25 incentives or requirements under section
26 113; or

1 “(ii) afford greater access to the elec-
 2 tric power transmission and local distribu-
 3 tion systems by qualified generators (as
 4 defined in section 113) or afford greater
 5 compensation or credit for electricity gen-
 6 erated by the qualified generators.”.

7 **SEC. 4. CONTRACTS FOR RENEWABLE ENERGY FOR EXECU-**
 8 **TIVE AGENCIES.**

9 Section 501(b)(1)(B) of title 40, United States Code,
 10 is amended—

11 (1) by striking “A contract” and inserting the
 12 following:

13 “(i) IN GENERAL.—Except as pro-
 14 vided in clause (ii), a contract”; and

15 (2) by adding at the end the following:

16 “(ii) RENEWABLE ENERGY.—A con-
 17 tract for renewable energy (as defined in
 18 section 203(b) of the Energy Policy Act of
 19 2005 (42 U.S.C. 15852(b))) may be made
 20 for a period of not more than 30 years.”.

21 **SEC. 5. PROHIBITION OF EXCESSIVE FEES FOR SOLAR EN-**
 22 **ERGY SYSTEMS BUILDING PERMITS.**

23 (a) DEFINITION OF SOLAR ENERGY SYSTEM.—In
 24 this section, the term “solar energy system” means, with
 25 respect to a structure, equipment that uses solar energy

1 to generate electricity for, to heat or cool, or provide hot
2 water for use in, the structure.

3 (b) REGULATIONS.—Not later than 180 days after
4 the date of enactment of this Act, the Secretary of Hous-
5 ing and Urban Development, in consultation with the Sec-
6 retary of Energy, shall issue regulations providing that the
7 cost of a permit or license required by a State or unit
8 of local government for construction or installation of any
9 solar energy system shall not exceed—

10 (1) in the case of a structure primarily for resi-
11 dential use, an amount determined to be appropriate
12 by the Secretary of Housing and Urban Develop-
13 ment; and

14 (2) in the case of a structure primarily for non-
15 residential use, 1 percent of the total cost of the in-
16 stallation or construction of the solar energy system,
17 but not more than \$10,000.

18 **SEC. 6. PROHIBITION OF RESTRICTIONS ON RESIDENTIAL**
19 **INSTALLATION OF SOLAR ENERGY SYSTEM.**

20 (a) REGULATIONS.—Within 180 days after the enact-
21 ment of this Act, the Secretary of Housing and Urban
22 Development, in consultation with the Secretary of En-
23 ergy, shall issue regulations—

24 (1) to prohibit any private covenant, contract
25 provision, lease provision, homeowners' association

1 rule or bylaw, or similar restriction, that impairs the
 2 ability of the owner or lessee of any residential
 3 structure designed for occupancy by 1 family to in-
 4 stall, construct, maintain, or use a solar energy sys-
 5 tem on such residential property; and

6 (2) to require that whenever any such covenant,
 7 provision, rule or bylaw, or restriction requires ap-
 8 proval for the installation or use of a solar energy
 9 system, the application for approval shall be proc-
 10 essed and approved by the appropriate approving en-
 11 tity in the same manner as an application for ap-
 12 proval of an architectural modification to the prop-
 13 erty, and shall not be willfully avoided or delayed.

14 (b) CONTENTS.—The regulations required under sub-
 15 section (a) shall provide that—

16 (1) such a covenant, provision, rule or bylaw, or
 17 restriction impairs the installation, construction,
 18 maintenance, or use of a solar energy system if it—

19 (A) unreasonably delays or prevents instal-
 20 lation, maintenance, or use;

21 (B) unreasonably increases the cost of in-
 22 stallation, maintenance, or use; or

23 (C) precludes use of such a system; and

24 (2) any fee or cost imposed on the owner or les-
 25 see of such a residential structure by such a cov-

1 enant, provision, rule or bylaw, or restriction shall
2 be considered unreasonable if—

3 (A) such fee or cost is not reasonable in
4 comparison to the cost of the solar energy sys-
5 tem or the value of its use; or

6 (B) treatment of solar energy systems by
7 the covenant, provision, rule or bylaw, or re-
8 striction is not reasonable in comparison with
9 treatment of comparable systems by the same
10 covenant, provision, rule or bylaw, or restric-
11 tion.

12 (c) SOLAR ENERGY SYSTEM.—For purposes of this
13 section, the term “solar energy system” means, with re-
14 spect to a structure, equipment that uses solar energy to
15 generate electricity for, to heat or cool, or provide hot
16 water for use in, the structure.

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