H. R. 1598

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 HOUSE OF REPRESENTATIVES

APRIL 15, 2011

Mr. CARDOZA (for himself and Mr. LUJÁN) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Oversight and Government Reform, Financial Services, and Transportation and Infrastructure, 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

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
4 SECTION 1. SHORT TITLE.
5 This Act may be cited as the “Solar Opportunity and
6 Local Access Rights Act”.

SEC. 2. NET METERING AND INTERCONNECTION STANDARDS.

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

“(d) NET METERING.—

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

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

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

“(i) a qualified generation unit; and

“(ii) any electric generation unit that qualifies for net metering under a net metering tariff or rule approved by a State.

“(C) LOCAL DISTRIBUTION SYSTEM.—The term ‘local distribution system’ means any system for the distribution of electric energy to the ultimate consumer of the electricity, whether or not the owner or operator of the system is a retail electric supplier.

“(D) NET METERING.—The term ‘net metering’ means the process of—
“(i) measuring the difference between the electricity supplied to a customer-generator and the electricity generated by the customer-generator that is delivered to a local distribution system at the same point of interconnection during an applicable billing period; and

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

“(E) QUALIFIED GENERATION UNIT.—The term ‘qualified generation unit’ means an electric energy generation unit that uses as the energy source of the unit solar energy to generate electricity to heat or cool that—

“(i) has a generating capacity of not more than 5,000 kilowatts;

“(ii) is located on premises that are owned, operated, leased, or otherwise controlled by the customer-generator;

“(iii) operates in parallel with the retail electric supplier; and
“(iv) is intended primarily to offset all or part of the requirements of the customer-generator for electric energy.

“(F) Retail electric supplier.—The term ‘retail electric supplier’ means any electric utility that sells electric energy to the ultimate consumer of the energy.

“(2) Adoption.—Not later than 1 year after the date of enactment of this subsection, each State regulatory authority (with respect to each electric utility for which the State regulatory authority has ratemaking authority), and each nonregulated electric utility, shall—

“(A) provide public notice and conduct a hearing with respect to the standards established under paragraph (3); and

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

“(3) Establishment of net metering standard.—

“(A) In general.—Each retail electric supplier shall offer to arrange (either directly or through a local distribution company or other third party) to make net metering available, on a first-come, first-served basis, to each of the
retail customers of the retail electric supplier in accordance with the requirements described in subparagraph (B) and other provisions of this subsection.

“(B) REQUIREMENTS.—The requirements referred to in subparagraph (A) are, with respect to a retail electric supplier, that—

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

“(ii) each retail electric supplier shall notify all of the retail customers of the retail electric supplier of the standard established under this paragraph as soon as practicable after the adoption of the standard.

“(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 net electricity produced or consumed during the billing period using the metering installed in accordance with paragraph (4).
“(C) Billing and crediting.—

“(i) Billing.—If the electricity supplied by the retail electric supplier exceeds
the electricity generated by the customer-generator during the billing period, the
customer-generator shall be billed for the net electric energy supplied by the retail
electric supplier in accordance with normal billing practices.

“(ii) Crediting.—

“(I) In general.—If electric energy generated by the customer-generator exceeds the electric energy supplied by the retail electric supplier during the billing period, the customer-generator shall be billed for the appropriate customer charges for that billing period and credited for the excess electric energy generated during the billing period, with the credit appearing as a kilowatt-hour credit on the bill for the following billing period.

“(II) Application of credits.—Any kilowatt-hour credits provided to a customer-generator under
this clause shall be applied to cus-
tomer-generator electric energy con-
sumption on the following billing pe-
riod bill (except for a billing period
that ends in the next calendar year).

“(III) Carryover of unused
credits.—At the beginning of each
12-month period, any unused kilo-
watt-hour credits remaining from the
preceding year will carry over to the
new 12-month period.

“(D) Use of time-differentiated
rates.—

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

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

“(II) the credits shall be reflected
on the bill of the customer-generator
as a monetary credit reflecting retail
rates at the time of generation of the
electric energy by the customer-generator.

“(ii) DIFFERENT TARIFFS OR SERVICES.—A retail electric supplier shall offer a customer-generator the choice of a time-differentiated energy tariff rate or a nontime-differentiated energy tariff rate, if the retail electric supplier offers the choice to customers in the same rate class as the customer-generator.

“(6) PERCENT LIMITATIONS.—

“(A) 8 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 is equal to or more than 8 percent of the capacity necessary to meet the average forecasted aggregate customer peak demand of the company for the calendar year.

“(B) 4 PERCENT LIMITATION.—The standard established under this subsection shall not apply for a 12-month period 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 unit is equal to or more than 4 percent of the capacity necessary to meet the 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 electric generating systems used by the customer-generators.

“(ii) NOTICE.—Each such retail electric supplier shall notify the State regulatory authority and the Commission at each time at which the total generating ca-
pacity of the customer-generators of the retail electric supplier reaches a level that equals or exceeds—

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

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

“(7) OWNERSHIP OF CREDITS.—

“(A) IN GENERAL.—For purposes of Federal and State laws providing renewable energy credits or greenhouse gas credits, a customer-generator with a qualified generation unit and net metering shall be treated as owning and having title to the renewable energy attributes, renewable energy credits and greenhouse gas emission credits relating to any electricity produced by the qualified generation unit.

“(B) RETAIL ELECTRIC SUPPLIERS.—No 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 standards.—

“(A) In general.—A qualified generation unit and net metering system used by a customer-generator shall meet all applicable safety and performance and reliability standards established by—

“(i) the national electrical code;

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

“(iii) Underwriters Laboratories; or

“(iv) the American National Standards Institute.

“(B) Additional charges.—The Commission shall, after consultation with State regulatory authorities and nonregulated local distribution systems and after notice and opportunity for comment, prohibit by regulation the imposition of additional charges by retail electric suppliers and local distribution systems for equipment or services for safety or performance that are in addition to those necessary to meet the standards and requirements referred to in subparagraph (A) and subsection (e).

“(9) Determination of compliance.—
“(A) IN GENERAL.—Any State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority), and each nonregulated electric utility, may apply to the Commission for a determination that any State net metering requirement or regulations complies with this subsection.

“(B) ORDERS.—In the absence of a determination under subparagraph (A), the Commission, on the motion of the Commission or pursuant to the petition of any interested person, may, after notice and opportunity for a hearing on the record, issue an order requiring against any retail electric supplier or local distribution company to require compliance with this subsection.

“(C) ENFORCEMENT.—

“(i) IN GENERAL.—Any person who violates this subsection shall be subject to a civil penalty in the amount of $500 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)(E) other than clause (ii) of subsection (d)(1)(E)); and

“(ii) do not exceed 5 megawatts of capacity.

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

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

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

“(C) Procedures.—
“(i) IN GENERAL.—The model standards shall have 2 separate procedures, including—

“(I) a standard for interconnecting qualified generation units of not more than 15 kilowatts; and

“(II) a separate standard that expedites interconnection for qualified generation units of more than 15 kilowatts but not more than 5 megawatts.

“(ii) BEST PRACTICES.—The procedures shall be based on the best practices that have been used in States that have adopted interconnection standards.

“(iii) MODEL RULE.—In designing the procedures, the Commission shall consider Interstate Renewable Energy Council Model Rule MR–I2005.

“(D) TIMELINE.—

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

“(I) adopt the model standards established under this paragraph, with or without modification; and
“(II) submit the standards to the

Commission for approval.

“(ii) Approval of Modification.—

The Commission shall approve a modification of the model standards only if the Commission determines that the modification is—

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

“(II) required by reason of local conditions.

“(E) Nonapproval of Standards for a State.—If standards have not been approved under this paragraph by the Commission for any State during the 2-year period beginning on the date of enactment of this subsection, the Commission shall, by rule or order, enforce the model standards of the Commission in the State until such time as State standards are approved by the Commission.

“(F) Updates.—

“(i) In General.—Not later than 2 years after the date of enactment of this subsection and after notice and opportunity for comment, the Commission shall
publish an update of the model standards, after considering changes in the underlying standards and technologies.

“(ii) Availability.—The updates shall be made available to State regulatory authorities for the consideration of the authorities.

“(2) Safety, reliability, performance, and cost.—

“(A) In general.—The standards under this subsection shall establish such measures for the safety and reliability of the affected equipment and local distribution systems as are appropriate.

“(B) Administration.—The standards shall—

“(i) be consistent with all applicable safety and performance standards established by—

“(I) the national electrical code;

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

“(III) Underwriters Laboratories;

or
“(IV) the American National Standards Institute; and

“(ii) impose not more than such minimum cost and technical burdens to the interconnecting customer generator as the Commission determines, by rule, are practicable.

“(3) ADDITIONAL CHARGES.—The model standards under this subsection shall prohibit the imposition of additional charges by local distribution systems for equipment or services for interconnection that are in excess of—

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

“(B) the charges and equipment requirements identified in the best practices of States with interconnection standards.

“(4) RELATIONSHIP TO EXISTING LAW REGARDING INTERCONNECTION.—Nothing in this subsection affects the application of section 111(d)(15) relating to interconnection.

“(5) CONSUMER-FRIENDLY CONTRACTS.—

“(A) IN GENERAL.—The Commission shall—
“(i) promulgate regulations that ensure that simplified contracts will be used for the interconnection of electric energy by electric energy transmission or local distribution systems and generating facilities that have a power production capacity of not greater than 5,000 kilowatts; and

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

“(B) LIABILITY OR INSURANCE.—The contracts shall not require liability or other insurance in excess of the liability or insurance that is typically carried by customer-generators for general liability.”.

(b) CONFORMING AMENDMENT.—Section 1262 of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451) is amended by striking paragraph (5) and inserting the following:

“(5) ELECTRIC UTILITY COMPANY.—

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

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

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

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

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

“(1) In general.—Except as provided in para-
graph (2), nothing”; and

(2) by adding at the end the following:

“(2) Net metering and interconnection
standards.—

“(A) In general.—Subject to subpara-
graph (B), no State or nonregulated utility may
adopt or enforce any standard or requirement
concerning net metering or interconnection that
restricts access to the electric power trans-
mission or local distribution system by qualified
generators beyond those standards and require-
ments established under section 113.
“(B) EQUIVALENT OR GREATER ACCESS.—
Nothing in this Act precludes a State from adopting or enforcing incentives or requirements to encourage qualified generation and net metering that—

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

“(ii) afford greater access to the electric power transmission and local distribution systems by qualified generators (as defined in section 113) or afford greater compensation or credit for electricity generated by the qualified generators.”.

SEC. 4. CONTRACTS FOR RENEWABLE ENERGY FOR EXECUTIVE AGENCIES.

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

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

“(i) IN GENERAL.—Except as provided in clause (ii), a contract”; and

(2) by adding at the end the following:

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

SEC. 5. SOLAR ENERGY SYSTEMS BUILDING PERMIT REQUIREMENTS FOR RECEIPT OF COMMUNITY DEVELOPMENT BLOCK GRANT FUNDS.

Section 104 of the Housing and Community Development Act of 1974 (42 U.S.C. 5304) is amended by adding at the end the following new subsection:

“(n) REQUIREMENTS FOR BUILDING PERMITS REGARDING SOLAR ENERGY SYSTEMS.—

“(1) IN GENERAL.—A grant under section 106 for a fiscal year may be made only if the grantee certifies to the Secretary that—

“(A) in the case of a grant under section 106(a) for any Indian tribe or insular area, during such fiscal year the cost of any permit or license, for construction or installation of any solar energy system for any structure, that is required by the tribe or insular area or by any other unit of general local government or other political subdivision of such tribe or insular area, complies with paragraph (2);

“(B) in the case of a grant under section 106(b) for any metropolitan city or urban coun-
ty, during such fiscal year the cost of any per-
mit or license, for construction or installation of
any solar energy system for any structure, that
is required by the metropolitan city or urban
county, or by any other political subdivision of
such city or county, complies with paragraph
(2); and
``(C) in the case of a grant under section
106(d) for any State, during such fiscal year
the cost of any permit or license, for construc-
tion or installation of any solar energy system
for any structure, that is required by the State,
or by any other unit of general local govern-
ment within any nonentitlement area of such
State, or other political subdivision within any
nonentitlement area of such State or such a
unit of general local government, complies with
paragraph (2).
``(2) LIMITATION ON COST.—The cost of permit
or license for construction or installation of any
solar energy system complies with this paragraph
only if such cost does not exceed the following
amount:
“(A) Residential structures.—In the case of a structure primarily for residential use, $500.

“(B) Nonresidential structures.—In the case of a structure primarily for nonresidential use, 1.0 percent of the total cost of the installation or construction of the solar energy system, but not in excess of $10,000.

“(3) Noncompliance.—If the Secretary determines that a grantee of a grant made under section 106 is not in compliance with a certification under paragraph (1)—

“(A) the Secretary shall notify the grantee of such determination; and

“(B) if the grantee has not corrected such noncompliance before the expiration of the 6-month period beginning upon notification under subparagraph (A), such grantee shall not be eligible for 5 percent of any amounts awarded under a grant under section 106 for the first fiscal year that commences after the expiration of such 6-month period.

“(4) Solar energy system.—For purposes of this subsection, the term ‘solar energy system’ means, with respect to a structure, equipment that
uses solar energy to generate electricity for, or to
heat or cool (or provide hot water for use in), such
structure.”.

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

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

(1) to prohibit any private covenant, contract
provision, lease provision, homeowners’ association
rule or bylaw, or similar restriction, that impairs the
ability of the owner or lessee of any residential
structure designed for occupancy by 1 family to in-
stall, construct, maintain, or use a solar energy sys-
tem on such residential property; and

(2) to require that whenever any such covenant,
provision, rule or bylaw, or restriction requires ap-
proval for the installation or use of a solar energy
system, the application for approval shall be proc-
essed and approved by the appropriate approving en-
tity in the same manner as an application for ap-
proval of an architectural modification to the prop-
erty, and shall not be willfully avoided or delayed.
(b) CONTENTS.—The regulations required under subsection (a) shall provide that—

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

(A) unreasonably delays or prevents installation, maintenance, or use;

(B) unreasonably increases the cost of installation, maintenance, or use; or

(C) precludes use of such a system; and

(2) any fee or cost imposed on the owner or lessee of such a residential structure by such a covenant, provision, rule or bylaw, or restriction shall be considered unreasonable if—

(A) such fee or cost is not reasonable in comparison to the cost of the solar energy system or the value of its use; or

(B) treatment of solar energy systems by the covenant, provision, rule or bylaw, or restriction is not reasonable in comparison with treatment of comparable systems by the same covenant, provision, rule or bylaw, or restriction.

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

SEC. 7. CENTER FOR ADVANCED SOLAR RESEARCH.

(a) Establishment.—The Secretary of Energy
shall establish a Center for Advanced Solar Research and
Development within the Office of Energy Efficiency and
Renewable Energy to carry out an advanced solar research
and development program to coordinate and promote the
further development of solar technologies. This program
shall include a competitive grant program for academia
and private research in solar technologies. The Center
shall serve as a clearinghouse for United States solar re-
search and development, supporting research, develop-
ment, and demonstration of advanced solar energy sys-
tems. The Center shall advance—

(1) performance, reliability, environmental im-
 pact, and cost-competitiveness of solar thermal and
photovoltaic technologies;

(2) large-scale photovoltaic and solar thermal
power plants;

(3) thermal and electricity storage technologies
to enhance the dispatchability of solar energy;

(4) fuel production technologies using solar en-
ergy;
(5) innovation in manufacturing techniques and processes for solar energy systems;

(6) materials and devices to improve photovoltaic conversion efficiencies and reduce costs;

(7) policy analysis aimed at increasing use of solar energy technologies, and monitoring the effectiveness of existing policies; and

(8) comprehensive solar systems integration.

(b) Authorization of Appropriations.—There are authorized to be appropriated to the Secretary of Energy for carrying out this section $25,000,000 for each of the fiscal years 2012 through 2016, to remain available until expended.