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111TH CONGRESS
2D SESSION

H. R. 5692

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

JULY 1, 2010

Mr. INSLEE (for himself, Mr. BARTLETT, Mr. EHLERS, Mr. GRIJALVA, and Mr. HIGGINS) introduced the following bill; which was referred to the Committee on Energy and Commerce

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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.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Americans Making Power Act''.

SEC. 2. FINDINGS.

Congress finds that it is in the public interest to:

(1) Enable small businesses, residences, schools, churches, farms with small electric generation units, and other retail electric consumers who generate electric energy to return surplus electric energy back to the utility for credit.

(2) Encourage private investment in renewable and alternate energy resources.

(3) Stimulate economic growth and job creation.

(4) Enhance the continued diversification of energy resources used in the United States, particularly with distributed generation systems that may have a positive impact on the transmission grid reliability.

(5) Remove regulatory barriers for net metering and interconnection.

(6) Limit variability in technologies and save costs to the consumer through net metering and interconnection standards.

(7) Address the underlying need for consumers to be able to interconnect to the electric grid.

SEC. 3. 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) COMBINED HEAT AND POWER SYSTEM.—

''(i) IN GENERAL.—The term 'combined heat and power system' means a system—

''(I) that uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of useful thermal energy (including heating and cooling applications);

''(II) that produces—

''(aa) at least 20 percent of its total useful energy in the form of thermal energy which is not used to produce electrical or

mechanical power (or combination thereof); and

''(bb) at least 20 percent of its total useful energy in the form of electrical or mechanical power (or a combination thereof), and

''(III) the energy efficiency percentage of which exceeds 60 percent.

''(ii) MAXIMUM CAPACITY.—The term 'combined heat and power system' shall not include any system that has a capacity in excess of 2,000 kilowatts or a mechanical energy capacity in excess of 2680 horsepower or an equivalent combination of electrical and mechanical energy capacities.

''(iii) ENERGY EFFICIENCY PERCENTAGE.—For purposes of this subparagraph, the energy efficiency percentage of a system is the fraction—

''(I) the numerator of which is the total useful electrical, thermal, and mechanical power produced by the system at normal operating rates,

and expected to be consumed in its normal application; and

"(II) the denominator of which is the lower heating value of the fuel sources for the system.

"(B) CUSTOMER-GENERATOR.—The term 'customer-generator' means any customer of an electric utility that generates electric energy, using a qualified generation unit, that is primarily intended to offset part or all of the customer-generator's electric energy requirements. A customer-generator does not need to be the owner of such a qualified generation unit.

"(C) LOCAL DISTRIBUTION COMPANY.—The term 'local distribution company' means the owner or operator of a local distribution system, or the provider of electric energy meter reading services, that is not a retail electric supplier.

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

''(E) NET METERING.—The term 'net metering' means the process of—

''(i) measuring the difference between the electric energy supplied to a customer-generator and the electric energy 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.

''(F) QUALIFIED GENERATION UNIT.—The term 'qualified generation unit' means an electric generation unit that uses renewable energy, a combined heat and power system, or a waste heat to electricity system, and—

''(i) has a generating capacity of not more than 2,000 kilowatts;

''(ii) operates in parallel with the retail electric supplier; and

''(iii) is intended primarily to offset all or part of the requirements of the customer-generator for electric energy.

''(G) RENEWABLE ENERGY.—The term 'renewable energy' means electric energy generated using—

''(i) renewable biomass, solar, geothermal, wind, ocean, hydroelectric, anaerobic digestion, landfill gas, or fuel cell sources;

''(ii) hydrogen produced from any such source; or

''(iii) any combination of such sources.

''(H) RETAIL ELECTRIC SUPPLIER.—The term 'retail electric supplier' means any electric utility that sells electric energy to the ultimate consumer of the energy or provides retail electric energy meter reading services for consumers.

''(I) WASTE HEAT TO ELECTRICITY SYSTEM.—

''(i) IN GENERAL.—The term 'waste heat to electricity system' means a system that generates electric energy through the

recovery of a qualified waste heat resource, including—

''(I) exhaust heat or flared gas from any industrial process;

''(II) waste gas or industrial tail gas that would otherwise be flared, incinerated, or vented;

''(III) a pressure drop in any gas, excluding any pressure drop to a condenser that subvents the resulting heat; and

''(IV) any such other form of waste heat resource as the Secretary may determine.

''(ii) LIMITATION.—A qualified waste heat resource under clause (i) does not include a heat resource from a process whose primary purpose is the generation of electric energy using a fossil fuel.

''(2) ADOPTION.—Not later than 1 year after the date of the enactment of this subsection, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority), and each nonregulated electric utility, shall adopt the standard established by paragraph (3), unless,

with respect to a State, the Commission determines that a net metering requirement in effect for such State complies with the standard established by paragraph (3).

''(3) ESTABLISHMENT OF NET METERING STANDARD.—The following Federal standard is hereby established:

''(A) NET METERING STANDARD.—Each retail electric supplier shall (either directly or through a local distribution company or other third party) make net metering available, on a first-come, first-served basis, to each customer-generator of the retail electric supplier in accordance with the requirements described in subparagraph (B) and the 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 for customer-generators shall be the same as the rates 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.—Except as otherwise provided in this paragraph, each retail electric supplier shall arrange to provide and install, for any customer-generator who qualifies for net metering under this subsection, an electric energy meter capable of net metering. In a case in which it is not practicable to provide and install such a meter, a retail electric supplier shall, at the expense of the retail electric supplier, either directly or through a local distribution company or other third party, arrange to have such a meter installed for the customer-generator concerned. Except as provided in subparagraph (C)(i), any subsequent electric energy meter change necessitated or requested for any reason by the customer-generator shall be paid for by the customer-generator.

''(B) CRITERIA.—A customer-generator may choose to use an existing electric energy meter under this paragraph if the following criteria are met:

''(i) The electric energy meter is capable of measuring the flow of electric energy both into and out of the qualified generation unit of the customer-generator.

''(ii) The electric energy meter is accurate with a degree of accuracy that the retail electric supplier or local distribution company requires when measuring electric energy flowing from the qualified generation unit of the customer-generator to the local distribution system or retail electric supplier.

''(C) ADDITIONAL METERS.—An additional electric energy meter may be installed for a customer-generator who qualifies for net metering under this subsection in either of the following circumstances:

''(i) The local distribution company or retail electric supplier may install an additional electric energy meter at its own ex-

pense if the customer-generator provides written consent.

''(ii) The customer-generator may request that the local distribution company or retail electric supplier install an electric energy meter, in addition to the electric energy meter that meets the criteria of subparagraph (B), at the customer-generator's expense. In such a case, the charge to the customer-generator shall be no more than the actual cost of the electric energy meter and its installation.

''(5) BILLING.—

''(A) IN GENERAL.—Each local distribution company or retail electric supplier shall calculate the electric energy consumption for a customer-generator using a net metering system in accordance with subparagraphs (B) through (D).

''(B) MEASUREMENT OF ELECTRIC ENERGY.—The local distribution company or retail electric supplier shall measure the net electric energy produced or consumed during a billing period using the meter installed in accordance with paragraph (4).

''(C) BILLING AND CREDITING.—

''(i) BILLING.—If the electric energy supplied by the retail electric supplier exceeds the electric energy generated by the customer-generator during a 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 a billing period, the customer-generator shall be billed for the appropriate customer charges for such billing period and credited for the excess electric energy generated during such 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 the customer-generator's electric energy consumption on the bill for the following billing period.

"(III) CARRYOVER OF UNUSED CREDITS.—At the beginning of each 12-month period, any unused kilowatt-hour credits remaining from the preceding 12-month period shall be reimbursed to the customer-generator at the average wholesale market rate for the preceding 12-month period.

"(D) USE OF TIME-DIFFERENTIATED ENERGY TARIFF RATES.—

"(i) 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.

"(ii) CREDITS.—If a customer-generator is using a meter installed in accordance with paragraph (4) and retail billing

arrangement that has time-differentiated energy tariff rates—

"(I) a kilowatt-hour credit described in this paragraph shall be based on the ratio of the time-of-use rate to the lowest time-of-use rate over the course of a 12-month period; and

"(II) excess kilowatt-hour credits in any individual time-of-use period shall be applied to other time-of-use periods in the same billing period, with any remaining excess for the billing period carried over to the next billing period.

"(iii) MONETARY CREDIT.—If, upon review, a retail electric supplier finds the crediting method under clause (ii) inconsistent with its current billing practices, such retail electric supplier may elect to convert excess kilowatt-hour credits under time-of-use billing to a monetary value based on the time when the kilowatt-hours were generated and provide a monetary

credit to the customer-generator on the bill for the following billing period.

''(6) COST RECOVERY MECHANISM.—Regulated utilities shall be granted the authority to recover, through retail rates approved by the applicable public utility commission, any retail electric revenues lost as a result of electric energy generation by a customer-generator, less the associated power and other costs avoided by the utility.

''(7) PERCENT LIMITATIONS.—

''(A) 6 PERCENT LIMITATION.—The standard established by paragraph (3) of this subsection shall not apply for a 12-month period to any customer-generator served by a local distribution company or retail electric supplier if, at the beginning of such 12-month period, the total generating capacity of all customer-generators with net metering systems served by the local distribution company or retail electric supplier is equal to or more than 6 percent of the capacity necessary to meet the average forecasted aggregate customer peak demand of the retail electric supplier for such 12-month period.

''(B) 4 PERCENT LIMITATION.—The standard established by paragraph (3) of this subsection shall not apply for a 12-month period to any customer-generator served by a local distribution company or retail electric supplier if, at the beginning of such 12-month period, the total generating capacity of all customer-generators with net metering systems served by the local distribution company or retail electric supplier using a single type of renewable energy, a combined heat and power system, or a waste heat to electricity system, is equal to or more than 4 percent of the capacity necessary to meet the forecasted aggregate customer peak demand of the retail electric supplier for such 12-month period.

''(C) RECORDS AND NOTICE.—

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

''(I) the type of generating technologies and energy sources used by the qualified generation units used by the customer-generators; and

''(II) the total generating capacity for all customer-generators using a specific type of qualified generation unit.

''(ii) NOTICE.—Each such retail electric supplier shall notify the State regulatory authority, as applicable, and the Commission at each time at which the total generating capacity 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 (A);

''(II) the limitation specified in subparagraph (A);

''(III) 75 percent of the limitation specified in subparagraph (B); or

''(IV) the limitation specified in subparagraph (B).

''(8) OWNERSHIP OF CREDITS.—For purposes of Federal and State laws providing renewable energy credits or greenhouse gas credits, a customer-generator using net metering shall be treated as owning and having title to any renewable energy attributes, renewable energy credits, and greenhouse

gas emission credits relating to any electric energy generated by the customer-generator.

''(9) SAFETY AND PERFORMANCE STANDARDS.—A net metering system used by a customer-generator shall be installed according to the interconnection rules approved by the State regulatory authority or the Commission.

''(10) DETERMINATION OF COMPLIANCE.—

''(A) IN GENERAL.—Any State regulatory authority (with respect to each electric utility for which it has ratemaking authority), and any nonregulated electric utility, may apply to the Commission for a determination that any State net metering requirement or regulation complies with the standard established by paragraph (3) and the requirements of this subsection.

''(B) ORDERS.—In the absence of a determination that a State net metering requirement or regulation complies with the standard established by paragraph (3) and the requirements of this subsection 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

any retail electric supplier or local distribution company to comply with this subsection.

''(C) ENFORCEMENT.—

''(i) IN GENERAL.—Any person who violates this subsection shall be subject to a civil penalty in an amount scaled appropriately to the nature of the violation, as determined by the Commission.

''(ii) ASSESSMENT.—The civil penalty under clause (i) 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 the enactment of this subsection, the Commission shall publish model standards for the physical connection between local distribution systems and qualified generation units. The Commission shall also modify the provisions of its Small Generator Interconnection Procedures relating to expediting the

permitting of qualified generation units up to 2,000 kilowatts.

''(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) EXPEDITED PROCEDURES.—

''(i) IN GENERAL.—The model standards shall have 2 separate expedited procedures as follows:

''(I) A procedure for the interconnection of qualified generation units that have a generating capacity of not more than 10 kilowatts.

''(II) A procedure for the interconnection of qualified generation units that have a generating capacity of more than 10 kilowatts but not more than 2,000 kilowatts.

''(ii) BEST PRACTICES.—The expedited procedures shall be based on the best

practices that have been used by State regulatory authorities and nonregulated electric utilities that have adopted interconnection standards.

''(iii) MODEL RULE.—In designing the expedited procedures for interconnection, the Commission shall consider the Interstate Renewable Energy Council's most recent model interconnection procedures.

''(D) ADOPTION OF STANDARDS.—

''(i) IN GENERAL.—Not later than 2 years after the date of the enactment of this subsection, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) and each nonregulated electric utility shall—

''(I) adopt the model standards established under this paragraph, with or without modification; and

''(II) submit the standards adopted by such State regulatory authority (with respect to each electric utility for which it has ratemaking authority) or such nonregulated electric

utility 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 regulatory authority or nonregulated electric utility during the 2-year period beginning on the date of the enactment of this subsection, the Commission shall, by rule or order, enforce the model standards of the Commission for the State regulatory authority or nonregulated electric utility until such time as such standards are approved by the Commission.

''(F) UPDATES.—

''(i) IN GENERAL.—The Commission shall publish an update of the model stand-

ards, at such a time as the Commission determines appropriate after—

"(I) submission and approval of standards of all State regulatory authorities (with respect to electric utilities for which they have ratemaking authority) and nonregulated electric utilities under subparagraph (D);

"(II) notice and opportunity for comment; and

"(III) considering changes in applicable safety and performance and reliability standards and underlying technologies.

"(ii) AVAILABILITY.—Any update of the model standards shall be made available to State regulatory authorities and nonregulated electric utilities for consideration by such authorities and utilities.

"(2) SAFETY, RELIABILITY, PERFORMANCE, AND COST.—

"(A) IN GENERAL.—The model standards established under this subsection shall establish such measures for the safety and reliability of the qualified generation unit and any other

equipment used for electric interconnection to the local distribution system as well as the local distribution system itself, as appropriate.

"(B) ADMINISTRATION.—The model standards established under this subsection 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 companies and retail electric suppliers for equipment or services for interconnection that are in excess of—

''(A) the charges necessary to meet the standards or provide net metering to greater types or numbers of customers or for larger generators or remove administrative burdens; and

''(B) the charges and equipment requirements identified in the best practices of State regulatory authorities (with respect to electric utilities for which they have ratemaking authority) and nonregulated electric utilities with interconnection standards.

''(4) CONSUMER-FRIENDLY CONTRACTS.—

''(A) IN GENERAL.—The Commission shall—

''(i) promulgate regulations that ensure that simplified contracts will be used for the interconnection of qualified generation units by a retail electric supplier or local distribution company; and

''(ii) consider the best practices outlined in the most recent Interstate Renewable Energy Council model for consumer-friendly contracts.

''(B) LIABILITY OR INSURANCE.—The contracts described in subparagraph (A) 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 utility company' does not include a qualified generation unit (as defined in section 113(d) of the Public Utility Regulatory Policies Act of 1978).''.

SEC. 4. RELATIONSHIP TO STATE LAW.

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

(1) by striking ''Nothing'' and inserting the following:

''(1) IN GENERAL.—Except as provided in paragraph (2), nothing''; and

(2) by adding at the end the following:

''(2) NET METERING AND INTERCONNECTION STANDARDS.—

''(A) IN GENERAL.—Subject to subparagraph (B), no State regulatory authority or nonregulated electric utility may adopt or enforce any standard or requirement concerning net metering or interconnection that restricts access to the electric power transmission or local distribution system by qualified generation units beyond those standards and requirements established under section 113.

''(B) EQUIVALENT OR GREATER ACCESS.—Nothing in this title precludes a State regulatory authority or nonregulated electric utility from adopting or enforcing incentives or requirements or removing administrative burdens to encourage the use of qualified generation units and net metering that—

''(i) are in addition to or equivalent to standards and requirements under section 113;

"(ii) afford greater access to the electric power transmission and local distribution systems by qualified generation units than the standards and requirements under section 113;

"(iii) afford greater compensation or credit for electric energy generated by the qualified generation units than the standards and requirements under section 113; or

"(iv) provide net metering to greater types or numbers of customers or for larger generators than the standards and requirements under section 113.

"(C) QUALIFIED GENERATION UNIT.—In this paragraph, the term 'qualified generation unit' has the meaning given such term in section 113(d).".

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