

110TH CONGRESS  
1ST SESSION

# H. R. 729

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.

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## IN THE HOUSE OF REPRESENTATIVES

JANUARY 30, 2007

Mr. INSLIEE (for himself, Mr. BARTLETT of Maryland, Mr. EHLERS, Ms. LEE, Mr. FARR, Mr. SMITH of Washington, Ms. KAPTUR, Mr. HINCHEY, Mr. GRIJALVA, Mr. DEFAZIO, Mr. PAYNE, Mr. HONDA, and Ms. HOOLEY) 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.

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 “Home Energy Genera-  
5 tion Act”.

1 **SEC. 2. FINDINGS.**

2 The Congress finds that it is in the public interest  
3 to:

4 (1) Enable small businesses, residences, schools,  
5 churches, farms with small electric generation units,  
6 and other retail electric customers who generate  
7 electric energy to return or sell surplus electric en-  
8 ergy on the open market.

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

11 (3) Stimulate the economic growth.

12 (4) Enhance the continued diversification sec-  
13 tion of energy resources used in the United States.

14 (5) Remove regulatory barriers for net meter-  
15 ing.

16 **SEC. 3. NET METERING AND INTERCONNECTION STAND-**  
17 **ARDS.**

18 Section 113 of the Public Utility Regulatory Policies  
19 Act of 1978 is amended by adding the following new sub-  
20 sections at the end thereof:

21 “(d) NET METERING.—

22 “(1) DEFINITIONS.—As used in this subsection:

23 “(A) The term ‘customer-generator’ means  
24 the owner or operator of a qualified generation  
25 unit.

1           “(B) The term ‘net metering’ means meas-  
2           uring the difference between the electricity sup-  
3           plied to a customer-generator and the electricity  
4           generated by a customer-generator that is deliv-  
5           ered to a local distribution section system at the  
6           same point of interconnection during an appli-  
7           cable billing period and providing an energy  
8           credit to a customer-generator in the form of a  
9           kilowatt-hour credit for each kilowatt-hour of  
10          energy produced by a customer-generator from  
11          a qualified generation unit.

12          “(C) The term ‘qualified generation unit’  
13          means an electric energy generation unit that  
14          meets each of the following requirements:

15                 “(i) The unit is a fuel cell or uses as  
16                 its energy source either solar, wind, bio-  
17                 mass, geothermal, anaerobic digestion or  
18                 landfill gas, or a combination of the fore-  
19                 going.

20                 “(ii) The unit has a generating capaci-  
21                 ty of not more than 1,000 kilowatts.

22                 “(iii) The unit is located on premises  
23                 that are owned, operated, leased, or other-  
24                 wise controlled by the customer-generator.

1           “(iv) The unit operates in parallel  
2           with the retail electric supplier.

3           “(v) The unit is intended primarily to  
4           offset part or all of the customer-genera-  
5           tor’s requirements for electric energy.

6           “(D) The term ‘retail electric supplier’  
7           means any electric utility that sells electric en-  
8           ergy to the ultimate consumer thereof.

9           “(E) The term ‘local distribution system’  
10          means any system for the distribution section of  
11          electric energy to the ultimate consumer there-  
12          of, whether or not the owner or operator of  
13          such system is also a retail electric supplier.

14          “(2) ADOPTION.—Not later than one year after  
15          the enactment of this subsection, each State regu-  
16          latory authority (with respect to each electric utility  
17          for which it has ratemaking authority), and each  
18          nonregulated electric utility, shall provide public no-  
19          tice and conduct a hearing respecting the standards  
20          established by paragraph (3) and, on the basis of  
21          such hearing, shall adopt such standard.

22          “(3) ESTABLISHMENT OF NET METERING  
23          STANDARD.—Each retail electric supplier shall offer  
24          to arrange (either directly or through a local dis-  
25          tribution company or other third party) to make net

1 metering available, on a first-come-first-served basis,  
2 to each of its retail customers in accordance with the  
3 provisions of this subsection and each of the fol-  
4 lowing requirements:

5 “(A) Rates and charges and contract  
6 terms and conditions for the sale of electric en-  
7 ergy to customer-generators shall be the same  
8 as the rates and charges and contract terms  
9 and conditions that would be applicable if the  
10 customer-generator did not own or operate a  
11 qualified generation unit and use a net meter-  
12 ing system.

13 “(B) Each retail electric supplier shall no-  
14 tify all of its retail customers of the standard  
15 established under this paragraph upon adoption  
16 of such standard.

17 “(4) NET ENERGY MEASUREMENT.—Each re-  
18 tail electric supplier shall arrange to provide to cus-  
19 tomer-generators who qualify for net metering under  
20 subsection (b) an electrical energy meter capable of  
21 net metering and measuring the flow of electricity  
22 either to or from the customer and using a single  
23 meter and single register, except where it is not  
24 practical to do so. Where it is not practical to pro-  
25 vide the meter to the customer-generator, the retail

1 electric supplier (either directly or through a local  
2 distribution company or other third party) shall, at  
3 its own expense, install one or more of such electric  
4 energy meters for the customer-generator concerned.

5 “(5) BILLING.—Each retail electric supplier  
6 subject to subsection (b) shall calculate the electric  
7 energy consumption for a customer using a net me-  
8 tering system in the following manner:

9 “(A) The retail electric supplier shall  
10 measure the net electricity produced or con-  
11 sumed during the billing period using the me-  
12 tering installed as provided in paragraph (4).

13 “(B) If the electricity supplied by the retail  
14 electric supplier exceeds the electricity gen-  
15 erated by the customer-generator during the  
16 billing period, the customer-generator shall be  
17 billed for the net electric energy supplied by the  
18 retail electric supplier in accordance with nor-  
19 mal billing practices

20 “(C)(i) If electric energy generated by the  
21 customer-generator exceeds the electric energy  
22 supplied by the retail electric supplier, the cus-  
23 tomer-generator shall be billed for the appro-  
24 priate customer charges for that billing period  
25 and credited for the excess electric energy gen-

1           erated during the billing period, with this credit  
2           appearing as a kilowatt-hour credit on the bill  
3           for the following billing period. The kilowatt-  
4           hour credits shall be applied to customer-gener-  
5           ator electric energy consumption on the fol-  
6           lowing billing period bill (except for a billing pe-  
7           riod that ends in the next calendar year). At  
8           the beginning of each calendar year, any re-  
9           maining unused kilowatt-hour credits shall be  
10          extinguished.

11                 “(ii) Except as provided in this clause, if  
12           the customer-generator is using a meter and re-  
13           tail billing arrangement that has time differen-  
14           tiated rates, (a ‘time-of-use meter’), the kilo-  
15           watt-hour credit shall be based on the ratio rep-  
16           resenting the difference in retail rates for each  
17           time of use rate or the credits shall be shown  
18           on the customer-generator’s bill as a monetary  
19           credit reflecting retail rates at the time of gen-  
20           eration of the electric energy by the customer-  
21           generator. Notwithstanding the standard estab-  
22           lished under section 11(d)(14), the supplier  
23           may require, at the supplier’s option, the cus-  
24           tomer-generator with net metering to take elec-  
25           tric service under a non-time differentiated en-

1           energy rate tariff or service that it offers to cus-  
2           tomers in the same rate class as the customer-  
3           generator.

4           “(6) PERCENT LIMITATIONS.—

5                   “(A) TWO PERCENT LIMITATION.—The  
6           standard established under this subsection shall  
7           not apply for a calendar year in the case of a  
8           customer-generator served by a local distribu-  
9           tion company when the total generating capaci-  
10          ty of all customer-generators with net metering  
11          systems served by that local distribution com-  
12          pany in that calendar year is equal to or in ex-  
13          cess of 2 percent of the capacity necessary to  
14          meet the local distribution company’s average  
15          forecasted aggregate customer peak demand for  
16          that calendar year.

17                   “(B) ONE PERCENT LIMITATION.—The  
18          standard established under this subsection shall  
19          not apply for a calendar year in the case of a  
20          customer-generator served by a local distribu-  
21          tion company when the total generating capaci-  
22          ty of all customer-generators with net metering  
23          systems served by that local distribution com-  
24          pany in that calendar year using a single type  
25          of qualified generation units (as listed in para-

1 graph (1)(C)(i)) is equal to or in excess of 1  
2 percent of the capacity necessary to meet the  
3 company's average forecasted aggregate cus-  
4 tomer peak demand for that calendar year.

5 “(C) RECORDS AND NOTICE.— Each re-  
6 tail electric supplier shall maintain, and make  
7 available to the public, records of the total gen-  
8 erating capacity of customer-generators of such  
9 system that are using net metering, the type of  
10 generating systems and energy source used by  
11 the electric generating systems used by such  
12 customer-generators. Each such retail electric  
13 supplier shall notify the State regulatory au-  
14 thority and the Federal Energy Regulatory  
15 Commission when the total generating capacity  
16 of such customer-generators is equal to or in  
17 excess of the limitations set forth in subpara-  
18 graph (B).

19 “(7) OWNERSHIP OF CREDITS.—For purposes  
20 of Federal and State laws providing renewable en-  
21 ergy credits or greenhouse gas credits, the customer-  
22 generator with a qualified generating unit and net  
23 metering shall be treated as owning and having title  
24 to the renewable energy attributes, renewable energy  
25 credits and greenhouse gas emission credits related

1 to any electricity produced by the qualified gener-  
2 ating unit. No retail electric supplier shall claim title  
3 to or ownership of any renewable energy attributes,  
4 renewable energy credits or greenhouse gas emission  
5 credits of the customer-generator as a result of  
6 interconnecting the customer-generator or providing  
7 or offering the customer-generator net metering.

8 “(8) SAFETY AND PERFORMANCE STAND-  
9 ARDS.—(A) A qualified generation unit and net me-  
10 tering system used by a customer-generator shall  
11 meet all applicable safety and performance and reli-  
12 ability standards established by the national elec-  
13 trical code, the Institute of Electrical and Elec-  
14 tronics Engineers, Underwriters Laboratories, or the  
15 American National Standards Institute.

16 “(B) The Commission shall, after consultation  
17 with State regulatory authorities and nonregulated  
18 local distribution systems and after notice and op-  
19 portunity for comment, prohibit by regulation the  
20 imposition of additional charges by electric suppliers  
21 and local distribution systems for equipment or serv-  
22 ices for safety or performance that are additional to  
23 those necessary to meet the standards and require-  
24 ments referred to in subparagraph (A) of this para-

1 graph and subsection (e) of this section (relating to  
2 interconnection).

3 “(9) DETERMINATION OF COMPLIANCE.—Any  
4 State regulatory authority (with respect to each elec-  
5 tric utility for which it has ratemaking authority),  
6 and each nonregulated electric utility may apply to  
7 the Commission for a determination that any State  
8 net metering requirement or regulations complies  
9 with the requirements of this subsection. In the ab-  
10 sence of such a determination, the Commission, on  
11 its own motion or pursuant to the petition of any in-  
12 terested person, may, after notice and opportunity  
13 for a hearing on the record, issue an order requiring  
14 against any retail electric supplier or local distribu-  
15 tion company, or both, to require compliance with  
16 this subsection. Any person who violates any require-  
17 ment of this subsection or any order of the Commis-  
18 sion under this subsection shall be subject to civil  
19 penalties in the amount of \$10,000 for each day  
20 that such violation continues. Such penalties may be  
21 assessed by the Commission, after notice and oppor-  
22 tunity for hearing, in the same manner as penalties  
23 are assessed under section 31(d) of the Federal  
24 Power Act.

25 “(e) INTERCONNECTION STANDARDS.—

1           “(1) DEFINITIONS.—For purposes of this sub-  
2           section, the terms defined in subsection (d) shall  
3           apply.

4           “(2) MODEL STANDARDS.—(A) Within one year  
5           after the enactment of this subsection the Commis-  
6           sion shall publish model standards for the physical  
7           connection between local distribution systems and  
8           qualified generation units and electric generation  
9           units that meet the requirements of subsection  
10          (d)(1)(C) other than clause (ii) thereof and that do  
11          not exceed 20,000 kilowatts of capacity. Such model  
12          standards shall be designed to encourage the use of  
13          qualified generation units and to ensure the safety  
14          and reliability of such units and the local distribu-  
15          tion systems interconnected with such units.

16          “(B) The model standards shall have two sepa-  
17          rate expedited procedures for interconnecting quali-  
18          fied generation units up to 15 kilowatts and a sepa-  
19          rate standard that expedites interconnection for  
20          qualified generation units up to 2000 kilowatts.  
21          Such expedited procedures shall be based on those  
22          best practices among the States that have adopted  
23          interconnection standards. In designing such expe-  
24          dited procedures, the Commission shall consider

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

3 “(C) Within 2 years after the enactment of this  
4 subsection, each State shall adopt the model stand-  
5 ards published under this paragraph, with or with-  
6 out modification, and submit such standards to the  
7 Commission for approval. The Commission shall ap-  
8 prove a modification of the model standards only if  
9 the Commission determines that such modification is  
10 consistent with or superior to the purpose of such  
11 standards and is required by reason of local condi-  
12 tions.

13 “(D) If standards have not been approved  
14 under this paragraph by the Commission for any  
15 State within 2 years after the enactment of this sub-  
16 section, the Commission shall, by rule or order, en-  
17 force the Commission’s model standards in such  
18 State until such time as State standards are ap-  
19 proved by the Commission.

20 “(E) Within two years after the enactment of  
21 this subsection, and after notice and opportunity for  
22 comment, the Commission shall publish an update of  
23 such model standards, considering changes in the  
24 underlying standards and technologies. Such updates

1 shall be made available to State regulatory authori-  
2 ties for their consideration.

3 “(3) SAFETY, RELIABILITY, PERFORMANCE,  
4 AND COST.—The standards under this section shall  
5 establish those measures for the safety and reli-  
6 ability of the affected equipment and local distribu-  
7 tion systems as may be appropriate. Such standards  
8 shall be consistent with all applicable safety and per-  
9 formance standards established by the national elec-  
10 trical code, the Institute of Electrical and Elec-  
11 tronics Engineers, Underwriters Laboratories, or the  
12 American National Standards Institute yet con-  
13 stitute the minimum cost and technical burdens to  
14 the interconnecting customer generator as the Com-  
15 mission shall, by rule, prescribe.

16 “(4) ADDITIONAL CHARGES.—The model stand-  
17 ards under this subsection prohibit the imposition of  
18 additional charges by local distribution systems for  
19 equipment or services for interconnection that are  
20 additional to those necessary to meet such standards  
21 and that are in excess of the charges and equipment  
22 requirements identified in the best practices of  
23 states with interconnection standards.

24 “(5) RELATIONSHIP TO EXISTING LAW REGARD-  
25 ING INTERCONNECTION.—Nothing in this subsection

1 affects the application of section 111(d)(15) relating  
2 to interconnection.

3 “(6) CONSUMER FRIENDLY CONTRACTS.—The  
4 Commission shall promulgate regulations insuring  
5 that simplified contracts will be used for the inter-  
6 connection of electric energy by electric energy  
7 transmission or distribution systems and generating  
8 facilities that have a power production capacity not  
9 greater than 2000 kilowatts and shall consider the  
10 best practices for consumer friendly contracts adopt-  
11 ed by States or national associations of state regu-  
12 lators. Such contracts shall not require liability or  
13 other insurance in excess of what is typically carried  
14 by customer-generators for general liability.

15 “(7) ENFORCEMENT.—Any person who violates  
16 any requirement of this subsection shall be subject  
17 to civil penalties in the amount of \$10,000 for each  
18 day that such violation continues. Such penalties  
19 may be assessed by the Commission, after notice and  
20 opportunity for hearing, in the same manner as pen-  
21 alties are assessed under section 31(d) of the Fed-  
22 eral Power Act.”.

23 **SEC. 4. RELATIONSHIP TO STATE LAW.**

24 Section 117 of the Public Utility Regulatory Policies  
25 Act of 1978 is amended by striking “Nothing” and insert-

1 ing “(1) Except as provided in paragraph (2), nothing”  
2 and by adding the following at the end thereof:

3       “(2) No State or nonregulated utility may adopt or  
4 enforce any standard or requirement concerning net me-  
5 tering or interconnection that restricts access to the elec-  
6 tric power transmission or distribution system by qualified  
7 generators beyond those standards and requirements iden-  
8 tified in section 113. Nothing in this Act shall preclude  
9 a State from adopting or enforcing incentives or require-  
10 ments to encourage qualified generation and net metering  
11 that are additional to or equivalent to those required  
12 under section 113 or that afford greater access to the elec-  
13 tric power transmission and distribution system by quali-  
14 fied generators as defined in section 113 or afford greater  
15 compensation or credit for electricity generated by such  
16 generators.”.

○