

106TH CONGRESS  
1ST SESSION

# H. R. 2947

To amend the Federal Power Act 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

SEPTEMBER 24, 1999

Mr. INSLEE (for himself, Mr. BARTLETT of Maryland, Mr. EHLERS, Mr. BAIRD, Mr. BLUMENAUER, Mr. BOEHLERT, Mr. COOK, Mr. DEFazio, Mr. DICKS, Mr. EVANS, Mr. FARR of California, Mr. FILNER, Mr. FROST, Mr. GILMAN, Mr. GUTIERREZ, Mr. HINCHEY, Mr. KENNEDY of Rhode Island, Mr. LEACH, Mr. LEWIS of Georgia, Mr. McDERMOTT, Mr. METCALF, Ms. MILLENDER-McDONALD, Ms. PELOSI, Mr. STRICKLAND, Mr. UDALL of Colorado, Mr. UDALL of New Mexico, Mr. UNDERWOOD, and Mr. VENTO) introduced the following bill; which was referred to the Committee on Commerce

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## A BILL

To amend the Federal Power Act 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.**

17 Part II of the Federal Power Act is amended by add-  
18 ing the following new section at the end thereof:

19 **“SEC. 215. NET METERING.**

20 “(a) DEFINITIONS.—As used in this section:

21 “(1) The term ‘customer-generator’ means the  
22 owner or operator of an electric generation unit  
23 qualified for net metering under this section.

24 “(2) The term ‘net metering’ means measuring  
25 the difference between the electricity supplied to a  
26 customer-generator and the electricity generated by

1 a customer-generator that is delivered to a local dis-  
2 tribution section system at the same point of inter-  
3 connection during an applicable billing period.

4 “(3) The terms ‘electric generation unit quali-  
5 fied for net metering’ and ‘qualified generation unit’  
6 mean an electric energy generation unit that meets  
7 the requirements of paragraph (5) and each of the  
8 following requirements:

9 “(A) The unit is a fuel cell or uses as its  
10 energy source either solar, wind, or biomass.

11 “(B) The unit has a generating capacity of  
12 not more than 100 kilowatts.

13 “(C) The unit is located on premises that  
14 are owned, operated, leased, or otherwise con-  
15 trolled by the customer-generator.

16 “(D) The unit operates in parallel with the  
17 retail electric supplier.

18 “(E) The unit is intended primarily to off-  
19 set part or all of the customer-generator’s re-  
20 quirements for electric energy.

21 “(4) The term ‘retail electric supplier’ means  
22 any person that sells electric energy to the ultimate  
23 consumer thereof.

24 “(5) The term ‘local distribution system’ means  
25 any system for the distribution section of electric en-

1       energy to the ultimate consumer thereof, whether or  
2       not the owner or operator of such system is also a  
3       retail electric supplier.

4       “(b) ADOPTION.—Not later than one year after the  
5       enactment of this section, each retail electric supplier shall  
6       comply with each of the following requirements and notify  
7       all of its retail customers of such requirements not less  
8       frequently than quarterly:

9               “(1) The supplier shall offer to arrange (either  
10       directly or through a local distribution company or  
11       other third party) to make available, on a first-come-  
12       first-served basis, to each of its retail customers that  
13       has installed an energy generation unit that is in-  
14       tended for net metering and that notifies the sup-  
15       plier of its generating capacity an electric energy  
16       meter that is capable of net metering if the cus-  
17       tomer-generator’s existing electrical meter cannot  
18       perform that function.

19               “(2) Rates and charges and contract terms and  
20       conditions for the sale of electric energy to cus-  
21       tomer-generators shall be the same as the rates and  
22       charges and contract terms and conditions that  
23       would be applicable if the customer-generator did  
24       not own or operate a qualified generation unit and  
25       use a net metering system.

1 Any retail electric supplier or local distribution company  
2 may, at its own expense, install one or more additional  
3 electric energy meters to monitor the flow of electricity  
4 in either direction or to reflect the time of generation or  
5 both. Whenever a customer-generator with a net metering  
6 system uses any energy generation system entitled to cred-  
7 its under a Federal minimum renewable energy generation  
8 requirement, the total amount of energy generated by that  
9 system shall be treated as generated by the retail electric  
10 supplier for purposes of such requirement.

11 “(c) NET ENERGY MEASUREMENT AND BILLING.—  
12 Each retail electric supplier subject to subsection (b) shall  
13 calculate the net energy measurement for a customer  
14 using a net metering system in the following manner:

15 “(1) The retail electric supplier shall measure  
16 the net electricity produced or consumed during the  
17 billing period using the metering referred to in para-  
18 graph (1) or (2) of subsection (b).

19 “(2) If the electricity supplied by the retail elec-  
20 tric supplier exceeds the electricity generated by the  
21 customer-generator during the billing period, the  
22 customer-generator shall be billed for the net elec-  
23 tricity supplied by the retail electric supplier in ac-  
24 cordance with normal metering practices.

1           “(3) If electricity generated by the customer-  
2 generator exceeds the electricity supplied by the re-  
3 tail electric supplier, the customer-generator—

4                   “(A) shall be billed for the appropriate  
5 customer charges for that billing period;

6                   “(B) shall be credited for the excess elec-  
7 tric energy generated during the billing period,  
8 with this credit appearing on the bill for the fol-  
9 lowing billing period (except for a billing period  
10 that ends in the next calendar year); and

11                   “(C) shall not be charged for transmission  
12 losses.

13           If the customer-generator is using a meter that re-  
14 flects the time of generation (a ‘real time meter’),  
15 the credit shall be based on the retail rates for sale  
16 by the retail electric supplier at the time of such  
17 generation. At the beginning of each calendar year,  
18 any remaining unused kilowatt-hour credit accumu-  
19 lated by a customer-generator during the previous  
20 year may be sold by the customer-generator to any  
21 electric supplier that agrees to purchase such credit.  
22           In the absence of any such purchase, the credit shall  
23 be assigned (at no cost) to the retail electric supplier  
24 that supplied electric energy to such customer-gener-  
25 ator at the end of the previous year.

1 “(d) PERCENT LIMITATIONS.—

2 “(1) TWO PERCENT LIMITATION.—A local dis-  
3 tribution company retail electric supplier shall not be  
4 required to provide local distribution service with re-  
5 spect to additional customer-generators after the  
6 date during any calendar year on which the total  
7 generating capacity of all customer-generators with  
8 qualified generation facilities and net metering sys-  
9 tems served by that local distribution company is  
10 equal to or in excess of 2 percent of the capacity  
11 necessary to meet the company’s average forecasted  
12 aggregate customer peak demand for that calendar  
13 year.

14 “(2) ONE PERCENT LIMITATION.—A local dis-  
15 tribution company retail electric supplier shall not be  
16 required to provide local distribution service with re-  
17 spect to additional customer-generators using a sin-  
18 gle type of qualified energy generation system after  
19 the date during any calendar year on which the total  
20 generating capacity of all customer-generators with  
21 qualified generation facilities of that type and net  
22 metering systems served by that local distribution  
23 company is equal to or in excess of 1 percent of the  
24 capacity necessary to meet the company’s average

1 forecasted aggregate customer peak demand for that  
2 calendar year.

3 “(3) RECORDS AND NOTICE.—Each retail elec-  
4 tric supplier shall maintain, and make available to  
5 the public, records of the total generating capacity  
6 of customer-generators of such system that are  
7 using net metering, the type of generating systems  
8 and energy source used by the electric generating  
9 systems used by such customer-generators. Each  
10 such retail electric supplier shall notify the Commis-  
11 sion when the total generating capacity of such cus-  
12 tomer-generators is equal to or in excess of 2 per-  
13 cent of the capacity necessary to meet the supplier’s  
14 aggregate customer peak demand during the pre-  
15 vious calendar year and when the total generating  
16 capacity of such customer-generators using a single  
17 type of qualified generation is equal to or in excess  
18 of 1 percent of such capacity.

19 “(e) SAFETY AND PERFORMANCE STANDARDS.—(1)  
20 A qualified generation unit and net metering system used  
21 by a customer-generator shall meet all applicable safety  
22 and performance and reliability standards established by  
23 the national electrical code, the Institute of Electrical and  
24 Electronics Engineers, Underwriters Laboratories, or the  
25 American National Standards Institute.



1       “(2) The Commission, after consultation with State  
2 regulatory authorities and nonregulated local distribution  
3 systems and after notice and opportunity for comment,  
4 may adopt by regulation additional control and testing re-  
5 quirements for customer-generators that the Commission  
6 determines are necessary to protect public safety and sys-  
7 tem reliability.

8       “(3) The Commission shall, after consultation with  
9 State regulatory authorities and nonregulated local dis-  
10 tribution systems and after notice and opportunity for  
11 comment, prohibit by regulation the imposition of addi-  
12 tional charges by electric suppliers and local distribution  
13 systems for equipment or services for safety or perform-  
14 ance that are additional to those necessary to meet the  
15 standards referred to in subparagraphs (A) and (B).

16       “(f) STATE AUTHORITY.—Nothing in this section  
17 shall preclude a State from establishing or imposing addi-  
18 tional incentives or requirements to encourage qualified  
19 generation and net metering additional to that required  
20 under this section.”.

21       “(g) INTERCONNECTION STANDARDS.—(1) Within  
22 one year after the enactment of this section the Commis-  
23 sion shall publish model standards for the physical connec-  
24 tion between local distribution systems and qualified gen-  
25 eration units and electric generation units that would be

1 qualified generation units but for the fact that the unit  
2 has a generating capacity of more than 100 kilowatts (but  
3 not more than 250 kilowatts). Such model standards shall  
4 be designed to encourage the use of qualified generation  
5 units and to insure the safety and reliability of such units  
6 and the local distribution systems interconnected with  
7 such units. Within 2 years after the enactment of this sec-  
8 tion, each State shall adopt such model standards, with  
9 or without modification, and submit such standards to the  
10 Commission for approval. The Commission shall approve  
11 a modification of the model standards only if the Commis-  
12 sion determines that such modification is consistent with  
13 the purpose of such standards and is required by reason  
14 of local conditions. If standards have not been approved  
15 under this paragraph by the Commission for any State  
16 within 2 years after the enactment of this section, the  
17 Commission shall, by rule or order, enforce the Commis-  
18 sion's model standards in such State until such time as  
19 State standards are approved by the Commission.

20       “(2) The standards under this section shall establish  
21 such measures for the safety and reliability of the affected  
22 equipment and local distribution systems as may be appro-  
23 priate. Such standards shall be consistent with all applica-  
24 ble safety and performance standards established by the  
25 national electrical code, the Institute of Electrical and

1 Electronics Engineers, Underwriters Laboratories, or the  
2 American National Standards Institute and with such ad-  
3 ditional safety and reliability standards as the Commission  
4 shall, by rule, prescribe. Such standards shall ensure that  
5 generation units will automatically isolate themselves from  
6 the electrical system in the event of an electrical power  
7 outage. Such standards shall permit the owner or operator  
8 of the local distribution system to interrupt or reduce de-  
9 liveries of available energy from the generation unit to the  
10 system when necessary in order to construct, install, main-  
11 tain, repair, replace, remove, investigate, or inspect any  
12 of its equipment or part of its system; or if it determines  
13 that curtailment, interruption, or reduction is necessary  
14 because of emergencies, forced outages, force majeure, or  
15 compliance with prudent electrical practices.

16       “(3) The model standards under this subsection pro-  
17 hibit the imposition of additional charges by local distribu-  
18 tion systems for equipment or services for interconnection  
19 that are additional to those necessary to meet such stand-  
20 ards.

21       “(h) INTERCONNECTION.—At the election of the  
22 owner or operator of the generation unit concerned, con-  
23 nections meeting the standards applicable under sub-  
24 section (g) may be made—

1           “(1) by such owner or operator at such owner’s  
2 or operator’s expense, or

3           “(2) by the owner or operator of the local dis-  
4 tribution system upon the request of the owner or  
5 operator of the generating unit and pursuant to an  
6 offer by the owner or operator of the generating unit  
7 to reimburse the local distribution system in an  
8 amount equal to the minimum cost of such connec-  
9 tion, consistent with the procurement procedures of  
10 the State in which the unit is located, except that  
11 the work on all such connections shall be performed  
12 by qualified electrical personnel certified by a  
13 responsible body or licensed by a State or local gov-  
14 ernment authority.

15       “(i) CONSUMER FRIENDLY CONTRACTS.—The Com-  
16 mission shall promulgate regulations insuring that sim-  
17 plified contracts will be used for the interconnection of  
18 electric energy by electric energy transmission or distribu-  
19 tion systems and generating facilities that have a power  
20 production capacity not greater than 250 kilowatts.”

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