

108TH CONGRESS  
1ST SESSION

# H. R. 3509

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

NOVEMBER 18, 2003

Mr. INSLEE (for himself, Mr. BARTLETT of Maryland, Mr. EHLERS, Mr. FROST, Mr. BOEHLERT, Mr. VAN HOLLEN, Mr. LEACH, Mr. LARSEN of Washington, Mr. UDALL of Colorado, Ms. BALDWIN, Mr. BLUMENAUER, Mrs. DAVIS of California, Mr. GUTIERREZ, Mr. HASTINGS of Washington, Mr. HINCHEY, Mrs. JONES of Ohio, Ms. KAPTUR, Ms. LEE, Mr. McDERMOTT, Mr. SMITH of Washington, and Ms. WOOLSEY) 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,*

1 **SECTION 1. SHORT TITLE.**

2       This Act may be cited as the “Home Energy Genera-  
3 tion Act”.

4 **SEC. 2. FINDINGS.**

5       The Congress finds that it is in the public interest  
6 to:

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

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

14          (3) Stimulate the economic growth.

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

17          (5) Remove regulatory barriers for net meter-  
18      ing.

19 **SEC. 3. NET METERING.**

20       Title II of the Public Utility Regulatory Policies Act  
21 of 1978 is amended by adding the following new section  
22 at the end thereof:

23 **“SEC. 215. NET METERING.**

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

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

4           “(2) The term ‘net metering’ means measuring  
5           the difference between the electricity supplied to a  
6           customer-generator and the electricity generated by  
7           a customer-generator that is delivered to a local dis-  
8           tribution section system at the same point of inter-  
9           connection during an applicable billing period.

10          “(3) The terms ‘electric generation unit quali-  
11          fied for net metering’ and ‘qualified generation unit’  
12          mean an electric energy generation unit that meets  
13          each of the following requirements:

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

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

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

21               “(D) The unit operates in parallel with the  
22               retail electric supplier.

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

1           “(4) The term ‘retail electric supplier’ means  
2           any person that sells electric energy to the ultimate  
3           consumer thereof.

4           “(5) The term ‘local distribution system’ means  
5           any system for the distribution section of electric en-  
6           ergy to the ultimate consumer thereof, whether or  
7           not the owner or operator of such system is also a  
8           retail electric supplier.

9           “(b) ADOPTION.—Not later than one year after the  
10          enactment of this section, subject to subsection (d), each  
11          retail electric supplier shall comply with each of the fol-  
12          lowing requirements and notify all of its retail customers  
13          of such requirements not less frequently than quarterly:

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

24               “(2) Rates and charges and contract terms and  
25               conditions for the sale of electric energy to cus-

1       tomer-generators shall be the same as the rates and  
2       charges and contract terms and conditions that  
3       would be applicable if the customer-generator did  
4       not own or operate a qualified generation unit and  
5       use a net metering system.

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

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

20               “(1) The retail electric supplier shall measure  
21       the net electricity produced or consumed during the  
22       billing period using the metering referred to in sub-  
23       section (b).

24               “(2) If the electricity supplied by the retail elec-  
25       tric supplier exceeds the electricity generated by the

1 customer-generator during the billing period, the  
2 customer-generator shall be billed for the net elec-  
3 tricity supplied by the retail electric supplier in ac-  
4 cordance with normal metering practices.

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

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

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

15 “(C) shall not be charged for transmission  
16 losses.

17 If the customer-generator is using a meter that re-  
18 flects the time of generation (a ‘real time meter’),  
19 the credit shall be based on the retail rates for sale  
20 by the retail electric supplier at the time of such  
21 generation. At the beginning of each calendar year,  
22 any remaining unused kilowatt-hour credit accumu-  
23 lated by a customer-generator during the previous  
24 year may be sold by the customer-generator to any  
25 electric supplier that agrees to purchase such credit.

1 In the absence of any such purchase, the credit shall  
2 be assigned (at no cost) to the retail electric supplier  
3 that supplied electric energy to such customer-gener-  
4 ator at the end of the previous year.

5 “(d) PERCENT LIMITATIONS.—

6 “(1) TWO PERCENT LIMITATION.—A retail elec-  
7 tric supplier shall not be required to provide local  
8 distribution service with respect to additional cus-  
9 tomer-generators after the date during any calendar  
10 year on which the total generating capacity of all  
11 customer-generators with qualified generation facili-  
12 ties and net metering systems served by that sup-  
13 plier is equal to or in excess of 2 percent of the ca-  
14 pacity necessary to meet the supplier’s average fore-  
15 casted aggregate customer peak demand for that  
16 calendar year.

17 “(2) ONE PERCENT LIMITATION.—A retail elec-  
18 tric supplier shall not be required to provide local  
19 distribution service with respect to additional cus-  
20 tomer-generators using a single type of qualified en-  
21 ergy generation system after the date during any  
22 calendar year on which the total generating capacity  
23 of all customer-generators with qualified generation  
24 facilities of that type and net metering systems  
25 served by that supplier is equal to or in excess of 1

1       percent of the capacity necessary to meet the sup-  
2       plier's average forecasted aggregate customer peak  
3       demand for that calendar year.

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

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



1 Electronics Engineers, Underwriters Laboratories, or the  
2 American National Standards Institute.

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

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

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

23 “(g) INTERCONNECTION STANDARDS.—(1) Within  
24 one year after the enactment of this section the Commis-  
25 sion shall publish model standards for the physical connec-

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

22       “(2) The standards under this section shall establish  
23 such measures for the safety and reliability of the affected  
24 equipment and local distribution systems as may be appro-  
25 priate. Such standards shall be consistent with all applica-

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

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

23       “(h) INTERCONNECTION.—At the election of the  
24 owner or operator of the generation unit concerned, con-

1 nections meeting the standards applicable under sub-  
2 section (g) may be made—

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

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

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

23 “(j) ENFORCEMENT.—Any person who violates any  
24 requirement of this section shall be subject to civil pen-  
25 alties in the amount of \$10,000 for each day that such

1 violation continues. Such penalties may be assessed by the  
2 Commission, after notice and opportunity for hearing, in  
3 the same manner as penalties are assessed under section  
4 31(d) of the Federal Power Act.”.

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