

**AMENDMENT TO COMMITTEE PRINT**  
**OFFERED BY MR. INSLEE OF WASHINGTON**

Page 37, after line 21, insert the following new section and make the necessary conforming changes in the table of contents:

1 **SEC. 109. NET METERING AND INTERCONNECTION STAND-**  
2 **ARDS FOR CONSUMER UTILIZATION OF**  
3 **SMART GRIDS.**

4 (a) **ADDITIONAL DEFINITIONS.**—Section 113 of the  
5 Public Utility Regulatory Policies Act of 1978 is amended  
6 by adding the following new subsections at the end there-  
7 of:

8 “(d) **NET METERING.**—

9 “(1) **DEFINITIONS.**—As used in this section:

10 “(A) The term ‘customer-generator’ means  
11 the owner or operator of a qualified generation  
12 unit.

13 “(B) The term ‘net metering’ means meas-  
14 uring the difference between the electricity sup-  
15 plied to a customer-generator and the electricity  
16 generated by a customer-generator that is deliv-  
17 ered to an electric utility at the same point of  
18 interconnection during an applicable billing pe-

1           riod and providing an energy credit to a cus-  
2           tomer-generator in the form of a kilowatt-hour  
3           credit for each kilowatt-hour of energy produced  
4           by a customer-generator from a qualified gen-  
5           eration unit.

6           “(C) The term ‘qualified generation unit’  
7           means an electric energy generation unit that  
8           meets each of the following requirements:

9                   “(i) The unit is a fuel cell or uses as  
10                  its energy source either solar, wind, bio-  
11                  mass, geothermal, anaerobic digestion or  
12                  landfill gas, or a combination of the fore-  
13                  going.

14                  “(ii) The unit has a generating capac-  
15                  ity of not more than 1,000 kilowatts.

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

19                  “(iv) The unit operates in parallel  
20                  with the electric utility.

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

24           “(e) MODEL INTERCONNECTION STANDARDS.—

1           “(1) MODEL STANDARDS.—(A) Within one year  
2           after the enactment of this subsection the Commis-  
3           sion shall publish model standards for the physical  
4           connection between electric utilities and qualified  
5           generation units and electric generation units that  
6           meet the requirements of subsection (d)(1)(C) and  
7           that do not exceed 20,000 kilowatts of capacity.  
8           Such model standards shall be designed to encour-  
9           age the use of qualified generation units and to en-  
10          sure the safety and reliability of such units and the  
11          local distribution systems interconnected with such  
12          units.

13          “(C) Within two years after the enactment of  
14          this subsection, and after notice and opportunity for  
15          comment, the Commission shall publish an update of  
16          such model standards, considering changes in the  
17          underlying standards and technologies. Such updates  
18          shall be made available to State regulatory authori-  
19          ties for their consideration.

20          “(2) SAFETY, RELIABILITY, PERFORMANCE,  
21          AND COST.—The model standards under this sub-  
22          section shall establish those measures for the safety  
23          and reliability of the affected equipment and local  
24          distribution systems as may be appropriate. Such  
25          standards shall be consistent with all applicable safe-

1 ty and performance standards established by the na-  
2 tional electrical code, the Institute of Electrical and  
3 Electronics Engineers, Underwriters Laboratories,  
4 or the American National Standards Institute yet  
5 constitute the minimum cost and technical burdens  
6 to the interconnecting customer generator as the  
7 Commission shall, by rule, prescribe.

8 “(3) ADDITIONAL CHARGES.—The model stand-  
9 ards under this subsection prohibit the imposition of  
10 additional charges by local distribution systems for  
11 equipment or services for interconnection that are  
12 additional to those necessary to meet such standards  
13 and that are in excess of the charges and equipment  
14 requirements identified in the best practices of  
15 states with interconnection standards.

16 “(4) RELATIONSHIP TO EXISTING LAW REGARD-  
17 ING INTERCONNECTION.—Nothing in this subsection  
18 affects the application of section 111(d)(16) (relat-  
19 ing to interconnection).

20 “(f) STATE LAWS.—Nothing in this section shall pre-  
21 clude a State from adopting or enforcing incentives or re-  
22 quirements to encourage qualified generation and net me-  
23 tering that are additional to or equivalent to those re-  
24 quired under this section or that afford greater access to  
25 the electric power transmission and distribution system by

1 qualified generators as defined in this section or afford  
2 greater compensation or credit for electricity generated by  
3 such generators.”.

4 (b) NET METERING STANDARD.—Section 113(b) of  
5 such Act is amended by adding the following new para-  
6 graphs at the end thereof:

7 “(6) NET METERING STANDARD.—(A) Each  
8 electric utility shall offer to arrange to make net me-  
9 tering available, on a first-come-first-served basis, to  
10 each of its retail customers in accordance with the  
11 provisions of this subsection and each of the fol-  
12 lowing requirements:

13 “(i) Rates and charges and contract terms  
14 and conditions for the sale of electric energy to  
15 customer-generators shall be the same as the  
16 rates and charges and contract terms and con-  
17 ditions that would be applicable if the customer-  
18 generator did not own or operate a qualified  
19 generation unit and use a net metering system.

20 “(ii) Each electric utility shall notify all of  
21 its retail customers of the standard established  
22 under this paragraph upon adoption of such  
23 standard.

24 “(B) NET ENERGY MEASUREMENT.—Each elec-  
25 tric utility shall arrange to provide to customer-gen-

1 erators who qualify for net metering under the  
2 standard under subparagraph (A) an electrical en-  
3 ergy meter capable of net metering and measuring  
4 the flow of electricity either to or from the customer  
5 and using a single meter and single register, except  
6 where it is not practical to do so. Where it is not  
7 practical to provide the meter to the customer-gener-  
8 ator, the electric utility shall, at its own expense, in-  
9 stall one or more of such electric energy meters for  
10 the customer-generator concerned.

11 “(C) BILLING.—Each electric utility shall cal-  
12 culate the electric energy consumption for a cus-  
13 tomer using a net metering system in the following  
14 manner:

15 “(i) The electric utility shall measure the  
16 net electricity produced or consumed during the  
17 billing period using the metering installed as  
18 provided in subparagraph (B).

19 “(ii) If the electricity supplied by the elec-  
20 tric utility exceeds the electricity generated by  
21 the customer-generator during the billing pe-  
22 riod, the customer-generator shall be billed for  
23 the net electric energy supplied by the electric  
24 utility in accordance with normal billing prac-  
25 tices.

1           “(iii)(I) If electric energy generated by the  
2           customer-generator exceeds the electric energy  
3           supplied by the electric utility, the customer-  
4           generator shall be billed for the appropriate  
5           customer charges for that billing period and  
6           credited for the excess electric energy generated  
7           during the billing period, with this credit ap-  
8           pearing as a kilowatt-hour credit on the bill for  
9           the following billing period. The kilowatt-hour  
10          credits shall be applied to customer-generator  
11          electric energy consumption on the following  
12          billing period bill (except for a billing period  
13          that ends in the next calendar year). At the be-  
14          ginning of each calendar year, any remaining  
15          unused kilowatt-hour credits shall be extin-  
16          guished.

17          “(II) Except as provided in this subclause,  
18          if the customer-generator is using a meter and  
19          retail billing arrangement that has time dif-  
20          ferentiated rates, (a ‘time-of-use meter’), the  
21          kilowatt-hour credit shall be based on the ratio  
22          representing the difference in retail rates for  
23          each time of use rate or the credits shall be  
24          shown on the customer-generator’s bill as a  
25          monetary credit reflecting retail rates at the

1 time of generation of the electric energy by the  
2 customer-generator. Notwithstanding the stand-  
3 ard established under section 111(d)(14), the  
4 utility may require, at the supplier's option, the  
5 customer-generator with net metering to take  
6 electric service under a non-time differentiated  
7 energy rate tariff or service that it offers to  
8 customers in the same rate class as the cus-  
9 tomer-generator

10 “(D) PERCENT LIMITATIONS.—

11 “(i) TWO PERCENT LIMITATION.—The  
12 standard established under this paragraph  
13 shall not apply for a calendar year in the  
14 case of a customer-generator served by an  
15 electric utility when the total generating  
16 capacity of all customer-generators with  
17 net metering systems served by that utility  
18 company in that calendar year is equal to  
19 or in excess of 2 percent of the capacity  
20 necessary to meet the utility's average  
21 forecasted aggregate customer peak de-  
22 mand for that calendar year.

23 “(ii) ONE PERCENT LIMITATION.—

24 The standard established under this sub-  
25 section shall not apply for a calendar year



1 in the case of a customer-generator served  
2 by an electric utility when the total gener-  
3 ating capacity of all customer-generators  
4 with net metering systems served by that  
5 electric utility in that calendar year using  
6 a single type of qualified generation units  
7 (as listed in subparagraph (A)(iii)(I)) is  
8 equal to or in excess of 1 percent of the ca-  
9 pacity necessary to meet the company's av-  
10 erage forecasted aggregate customer peak  
11 demand for that calendar year.

12 “(iii) RECORDS AND NOTICE.—Each  
13 electric utility shall maintain, and make  
14 available to the public, records of the total  
15 generating capacity of customer-generators  
16 of such system that are using net meter-  
17 ing, the type of generating systems and en-  
18 ergy source used by the electric generating  
19 systems used by such customer-generators.  
20 Each such electric utility shall notify the  
21 State regulatory authority when the total  
22 generating capacity of such customer-gen-  
23 erators is equal to or in excess of the limi-  
24 tations set forth in clause (iii).

1           “(E) OWNERSHIP OF CREDITS.—For pur-  
2           poses of Federal and State laws providing re-  
3           newable energy credits or greenhouse gas cred-  
4           its, the customer-generator with a qualified gen-  
5           erating unit and net metering shall be treated  
6           as owning and having title to the renewable en-  
7           ergy attributes, renewable energy credits and  
8           greenhouse gas emission credits related to any  
9           electricity produced by the qualified generating  
10          unit. No electric utility shall claim title to or  
11          ownership of any renewable energy attributes,  
12          renewable energy credits or greenhouse gas  
13          emission credits of the customer-generator as a  
14          result of interconnecting the customer-generator  
15          or providing or offering the customer-generator  
16          net metering.

17          “(F) SAFETY AND PERFORMANCE STAND-  
18          ARDS.—(i) A qualified generation unit and net  
19          metering system used by a customer-generator  
20          shall meet all applicable safety and performance  
21          and reliability standards established by the na-  
22          tional electrical code, the Institute of Electrical  
23          and Electronics Engineers, Underwriters Lab-  
24          oratories, or the American National Standards  
25          Institute.

1           “(ii) Each State regulatory authority and  
2           nonregulated utility, after notice and oppor-  
3           tunity for comment, shall prohibit by regulation  
4           the imposition of additional charges by electric  
5           suppliers and local distribution systems for  
6           equipment or services for safety or performance  
7           that are additional to those necessary to meet  
8           the standards and requirements referred to in  
9           clause (i) of this subparagraph and paragraph  
10          (6) of this subsection (relating to interconnec-  
11          tion).

12          “(7) INTERCONNECTION.—Each electric utility  
13          shall comply with the modal standards established  
14          under subsection (e) and shall use simplified con-  
15          tracts for the interconnection of electric energy by  
16          electric utilities and generating facilities that have a  
17          power production capacity not greater than 2000  
18          kilowatts, after consideration of the best practices  
19          for consumer friendly contracts adopted by States or  
20          national associations of State regulators. Such con-  
21          tracts shall not require liability or other insurance in  
22          excess of what is typically carried by customer-gen-  
23          erators for general liability.”.