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# A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. The legislature finds that net energy metering  
2 is uniquely helpful to Hawaii's homeowners and business owners  
3 because it allows them to fully hedge their future power costs  
4 and to know their future energy costs with certainty.

5           The legislature finds that net energy metering should  
6 persist even after the public utilities commission has  
7 established alternative compensation systems such as the feed in  
8 tariff because net energy metering serves a different need in  
9 the renewable energy marketplace.

10          The legislature finds that there is no technical  
11 justification for setting net energy metering project size  
12 limits at the current statutory maximum of fifty kilowatts.  
13 This is evidenced by the public utilities commission's recent  
14 decision to allow feed in tariff projects as large as five  
15 megawatts without reference to the type of circuit to which they  
16 are interconnected. It is also evidenced by the Hawaiian  
17 Electric Company, Inc. and its affiliates' (HECO Companies)  
18 proposals for systems that range from up to five hundred



1 kilowatts in the feed in tariff docket to two megawatts in the  
2 public utilities host docket. The legislature further finds  
3 that the HECO Companies already have a process in place to  
4 manage reliability issues associated with distributed generation  
5 via its Rule 14H, Interconnection of Distributed Generating  
6 Facilities Operating in Parallel with the Company's Electrical  
7 System. Because all net energy metered systems are distributed  
8 systems, Rule 14H provides a limit on the level of net energy  
9 metering penetration that is intended to engineer out technical  
10 problems caused by distributed energy systems.

11 In conclusion, the legislature finds that net energy  
12 metering should be perpetuated irrespective of the eventual  
13 introduction and uptake level of feed in tariff systems. The  
14 existence of feed in tariffs does not in any way constitute a  
15 justification for eliminating or reducing net energy metering.  
16 The legislature further finds that no changes to procurement  
17 rules or options can justify transferring customer-generators  
18 with net energy metering contracts off of those contracts.  
19 Customer-generators with net energy metering contracts should  
20 not be removed against their will from those contracts during  
21 the term of the contracts. Finally, the legislature finds that  
22 this Act applies only to investor-owned utilities.



1 SECTION 2. Chapter 269, part VI, Hawaii Revised Statutes,  
2 is amended by adding a new section to be appropriately  
3 designated and to read as follows:

4 **"§269- Administrative efficiency.** An electric utility  
5 shall not unreasonably deny, burden, or delay net energy  
6 metering service that is requested by an eligible customer-  
7 generator."

8 SECTION 3. Section 269-101, Hawaii Revised Statutes, is  
9 amended by:

10 1. Adding two new definitions to be appropriately inserted  
11 and to read as follows:

12 "Net surplus customer-generator" means an eligible  
13 customer-generator who has generated excess electricity, as  
14 determined by the net energy metering calculation in section  
15 269-105, at the end of the eligible customer-generator's  
16 twelve-month reconciliation period.

17 "Net surplus electricity compensation rate" means the rate  
18 established for exported energy under the feed-in tariff for  
19 that project size."

20 2. By amending "eligible customer-generator" to read as  
21 follows:



1            "Eligible customer-generator" means a metered residential  
2 or commercial customer, including a government entity, of an  
3 electric utility who owns and operates, leases, or purchases  
4 electricity from a solar, wind turbine, biomass, or  
5 hydroelectric energy generating facility, or a hybrid system  
6 consisting of two or more of these facilities, that is:

- 7            (1) Located on the customer's premises;
- 8            (2) Operated in parallel with the utility's transmission  
9            and distribution facilities;
- 10           (3) In conformance with the utility's interconnection  
11           requirements; and
- 12           (4) Intended primarily to offset part or all of the  
13           customer's own electrical requirements."

14           SECTION 4. Section 269-101.5, Hawaii Revised Statutes, is  
15 amended to read as follows:

16           "~~[+]§269-101.5[+]~~ **Maximum capacity of eligible customer-**  
17 **generator.** The eligible customer-generator shall have a  
18 capacity of not more than ~~[fifty kilowatts;]~~ two megawatts;  
19 provided that the public utilities commission may increase the  
20 maximum allowable capacity that eligible customer-generators may  
21 have to an amount greater than ~~[fifty kilowatts]~~ two megawatts  
22 by rule or order."



1 SECTION 5. Section 269-102, Hawaii Revised Statutes, is  
2 amended by amending subsection (a) to read as follows:

3 "(a) Every electric utility shall develop a standard  
4 contract or tariff providing for net energy metering and shall  
5 make this contract available to eligible customer-generators,  
6 upon request, on a first-come-first-served basis until the time  
7 that the total rated generating capacity produced by eligible  
8 customer-generators [~~equals .5 per cent of the electric~~  
9 ~~utility's system peak demand,~~] on a distribution feeder reaches  
10 fifteen per cent of that distribution feeder's penetration level  
11 or the penetration level that triggers additional technical  
12 study, as determined by the public utilities commission by rule  
13 or order, whichever is higher; provided that [the]:

14 (1) The public utilities commission may modify, by rule or  
15 order, the total rated generating capacity produced by  
16 eligible customer-generators; [~~provided further that~~  
17 the] and

18 (2) The public utilities commission shall ensure that a  
19 percentage of the total rated generating capacity  
20 produced by eligible customer-generators shall be  
21 reserved for electricity produced by eligible  
22 residential or small commercial customer-generators.



1           The public utilities commission may define, by rule or  
2 order, the maximum capacity for eligible residential or small  
3 commercial customer-generators. Notwithstanding the generating  
4 capacity requirements of this subsection, the public utilities  
5 commission may evaluate, on an island-by-island basis, the  
6 applicability of the generating capacity requirements of this  
7 subsection and, in its discretion, may exempt an island or a  
8 utility grid system from the generating capacity requirements."

9           SECTION 6. Section 269-104, Hawaii Revised Statutes, is  
10 amended to read as follows:

11           "**§269-104 Additional customer-generators.** Notwithstanding  
12 section 269-102, an electric utility is not obligated to provide  
13 net energy metering to additional customer-generators in its  
14 service area when the combined total peak generating capacity of  
15 all eligible customer-generators served by all the electric  
16 utilities in that service area furnishing net energy metering to  
17 eligible customer-generators [~~equals .5 per cent of the system~~  
18 ~~peak demand of those electric utilities,~~] on a distribution  
19 feeder reaches fifteen per cent of that distribution feeder's  
20 penetration level or the penetration level that triggers  
21 additional technical study, as determined by the public  
22 utilities commission by rule or order, whichever is higher;



1 provided that the public utilities commission may increase, by  
2 rule or order, the allowable percentage of the [electric  
3 utility's system peak demand] distribution feeder's penetration  
4 level produced from eligible customer-generators in the electric  
5 utility's service area, whereupon the electric utility will be  
6 obligated to provide net energy metering to additional eligible  
7 customer-generators in that service area up to the increased  
8 percentage amount."

9 SECTION 7. Section 269-106, Hawaii Revised Statutes, is  
10 amended to read as follows:

11 **"§269-106 Billing periods; twelve-month reconciliation.**

12 (a) Billing of net energy metering customers shall be on a  
13 monthly basis; provided that the last monthly bill for each  
14 [~~twelve month~~] thirty-six month period shall reconcile for that  
15 [~~twelve month~~] thirty-six month period the net electricity  
16 provided by the electric utility with:

- 17 (1) The electricity generated by the eligible customer-  
18 generator and fed back to the electric grid over the  
19 monthly billing period; and  
20 (2) Any unused credits for excess electricity from the  
21 eligible customer-generator carried over from prior



1 months since the last [~~twelve-month~~] thirty six  
2 reconciliation period.

3 (b) [~~Credits~~] The electric utility shall compensate the  
4 net surplus customer generator at the net surplus electricity  
5 rate compensation rate established by the public utilities  
6 commission for any credits for excess electricity from the  
7 [eligible] net surplus customer-generator that remain unused  
8 after each [~~twelve-month~~] thirty-six month reconciliation period  
9 [may not be carried over to the next twelve-month period]."

10 SECTION 8. Section 269-108, Hawaii Revised Statutes, is  
11 amended to read as follows:

12 **"§269-108 Net electricity producers; excess electricity**  
13 **credits and credit carry over.** At the end of each monthly  
14 billing period, where the electricity generated by the eligible  
15 customer-generator during the month exceeds the electricity  
16 supplied by the electric utility during that same period, the  
17 eligible customer-generator is a net electricity producer and  
18 the electric utility shall retain any excess kilowatt-hours  
19 generated during the prior monthly billing period; provided that  
20 the excess electricity generated by the customer-generator, if  
21 any, in each monthly billing period shall be carried over to the  
22 next month as a monetary value to the credit of the eligible





1 customer-generator, which credit may accumulate and be used to  
 2 offset the compensation owed the electric utility for the  
 3 eligible customer-generator's net kilowatt-hour consumption for  
 4 succeeding months within each [~~twelve-month~~] thirty-six month  
 5 period; provided further that the electric utility shall  
 6 reconcile the eligible customer-generator's electricity  
 7 production and consumption for each [~~twelve-month~~] thirty-six  
 8 month period as set forth in section 269-106. [~~The eligible~~  
 9 ~~customer-generator shall not be owed any compensation for excess~~  
 10 ~~kilowatt hours unless the electric utility enters into a~~  
 11 ~~purchase agreement with the eligible customer-generator for~~  
 12 ~~those excess kilowatt hours.]"~~

13 SECTION 9. Section 269-110, Hawaii Revised Statutes, is  
 14 amended to read as follows:

15 "**§269-110 [Termination by eligible customer-generators.]**  
 16 **Eligible customer-generators; termination; alternative credits**  
 17 **or compensation mechanisms.** If an eligible customer-generator  
 18 terminates the customer relationship with the electric utility,  
 19 the electric utility shall reconcile the eligible  
 20 customer-generator's consumption and production of electricity,  
 21 including any unused credits for excess electricity from the  
 22 eligible customer-generator carried over from prior months, for



1 the period following the last twelve-month reconciliation period  
2 to the date of termination of the relationship, according to the  
3 requirements set forth in this part.

4 If the public utilities commission, at any time,  
5 establishes alternative mechanisms for crediting or otherwise  
6 compensating eligible customer-generators for exported power,  
7 eligible customer-generators with existing net energy metering  
8 contracts shall have the option of maintaining those existing  
9 net energy metering contracts rather than converting to new  
10 alternative credits or compensation mechanisms."

11 SECTION 10. Section 269-111, Hawaii Revised Statutes, is  
12 amended to read as follows:

13 **"§269-111 Safety and performance standards.** (a) A solar,  
14 wind turbine, biomass, or hydroelectric energy generating  
15 system, or a hybrid system consisting of two or more of these  
16 facilities, used by an eligible customer-generator shall meet  
17 all applicable safety and performance standards established by  
18 the National Electrical Code, the Institute of Electrical and  
19 Electronics Engineers, and accredited testing laboratories such  
20 as the Underwriters Laboratories and, where applicable, rules of  
21 the public utilities commission regarding safety and  
22 reliability.



1 (b) For systems of [~~ten~~] one hundred kilowatts or less, an  
2 eligible customer-generator whose solar, wind turbine, biomass,  
3 or hydroelectric energy generating system, or whose hybrid  
4 system consisting of two or more of these facilities, meets the  
5 standards and rules under subsection (a) shall not be required  
6 to install additional controls, perform or pay for additional  
7 tests, or purchase additional liability insurance.

8 (c) For eligible customer-generator systems of greater  
9 than [~~ten~~] \_\_\_\_\_ kilowatts[~~7~~] on the island of Oahu,  
10 kilowatts on the islands of Hawaii and Maui, and up to  
11 kilowatts on the islands of Molokai and Lanai, the public  
12 utilities commission[~~7, either through~~] by decision and order,  
13 [~~by~~] tariff adoption, or [~~by~~] rule, shall:

- 14 (1) Set forth safety, performance, and reliability  
15 standards and requirements; and
- 16 (2) Establish the qualifications for exemption from a  
17 requirement to install additional controls, perform or  
18 pay for additional tests, or purchase additional  
19 liability insurance.

20 (d) The public utilities commission shall initiate a  
21 rulemaking proceeding by August 1, 2010 to adopt best practices



1 interconnection standards for solar, wind turbine, biomass, and  
2 hydroelectric energy generating facilities.

3 Upon adoption, the standards shall become the  
4 interconnection requirements of each electric utility subject to  
5 the jurisdiction of the public utilities commission. As part of  
6 the rulemaking proceeding, the public utilities commission shall  
7 consider:

- 8 (1) Standards for comparably-sized feed-in tariffs;  
9 (2) Interconnection standards adopted by other states  
10 within the twenty-four months prior to the rulemaking  
11 proceeding;  
12 (3) Standards adopted by the Federal Energy Regulatory  
13 Commission; and  
14 (4) Model standards developed by nonprofit organizations  
15 whose primary purpose is to promote renewable energy.

16 The public utilities commission shall adopt best practices  
17 interconnection standards no later than December 31, 2010."

18 SECTION 11. (a) The public utilities commission shall  
19 establish the net surplus electricity compensation rate, as  
20 defined by section 269-101, Hawaii Revised Statutes, by rule or  
21 order no later than January 1, 2011. The net surplus  
22 electricity compensation rate shall provide the net surplus



1 customer-generator, as defined by section 269-101, Hawaii  
2 Revised Statutes, just and reasonable compensation for the value  
3 of net surplus electricity, while leaving other ratepayers  
4 unaffected.

5 (b) The net surplus electricity compensation rate shall  
6 apply to net surplus electricity credits that have accrued for  
7 any twelve-month reconciliation period that is in progress on  
8 September 1, 2010, and any twelve-month reconciliation period  
9 occurring thereafter.

10 (c) Payment for net surplus electricity credits that have  
11 accrued between September 1, 2010, and the date of the  
12 establishment of the net surplus electricity compensation rate  
13 shall be made by the electric utility within sixty days from the  
14 date of the establishment of the net surplus electricity  
15 compensation rate.

16 (d) Payment for net surplus electricity credits that  
17 accrue on or after the date of establishment of the net surplus  
18 electricity compensation rate shall be made by the electric  
19 utility within sixty days of the end of the applicable  
20 twelve-month reconciliation period.

21 (e) For the purposes of this Act, "net surplus electricity  
22 credits" means the credits, in kilowatt-hours, for excess



1 electricity generated by an eligible customer-generator at the  
2 end of the eligible customer-generator's twelve-month  
3 reconciliation period, as determined by the net energy metering  
4 calculation in section 269-105, Hawaii Revised Statutes.

5 SECTION 12. Statutory material to be repealed is bracketed  
6 and stricken. New statutory material is underscored.

7 SECTION 13. This Act shall take effect on July 1, 2050.



**Report Title:**

Net Energy Metering; Renewable Energy; PUC; Surplus Electricity Compensation;

**Description:**

Requires electric utilities to compensate net metering surplus customer-generators for excess electricity at the end of the twelve-month period; increases customer-generator capacity to two megawatts; permits existing net-metered customers to remain with the net metering program regardless of available alternatives; increases the total allowable generating capacity produced by customer-generators to 15% of that distribution feeder's penetration level or the penetration level that triggers additional technical study, as determined by the PUC, whichever is higher; increases the maximum number of kilowatts a customer-generator system may have before public utilities commission approval for safety and performance standards is required; directs the PUC to determine the net surplus compensation rate. Effective 7/1/50. (SD2)

*The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.*

