A BILL FOR AN ACT

RELATING TO PUBLIC UTILITIES.

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

- 1 SECTION 1. The legislature finds that Hawaii is especially
- 2 vulnerable to the volatility in global oil markets. In November
- 3 2007, oil prices reached \$100 per barrel. Electric utilities
- 4 will shift these high fuel costs to electric utility consumers
- 5 in the form of higher electric utility rates. For example,
- 6 residential electric rates on Kauai could reach as high as 50
- 7 cents per kilowatt hour.
- 8 The legislature intends the amendments made by this Act to
- 9 the net energy metering law to signal to the public that
- 10 electricity generated by residential and commercial customer-
- 11 generators should play a significant role in the State's net
- 12 energy metering effort.
- 13 The purpose of this Act is to enhance Hawaii's energy and
- 14 economic security and reduce its vulnerability to fluctuating
- 15 fuel prices related to electricity generation by removing
- 16 barriers to the development of solar electric resources and
- 17 increasing the accessibility of net energy metering.



SECTION 2. Section 269-101, Hawaii Revised Statutes, is 1 2 amended to read as follows: 3 §269-101 Definitions. As used in this part: 4 "Eligible customer-generator" means a metered residential or commercial customer, including a government entity, of an 5 6 electric utility [who], which customer owns and operates, 7 leases, or purchases electricity from a solar, wind turbine, 8 biomass, or hydroelectric energy generating facility, or a 9 hybrid system consisting of two or more of these facilities, 10 that is: 11 Located on the customer's premises; (1)12 (2) Operated in parallel with the utility's transmission and distribution facilities; 13 14 (3) In conformance with the utility's interconnection 15 requirements; and 16 (4)Intended primarily to offset part or all of the 17 customer's own electrical requirements. "Net energy metering" means measuring the difference 18 19 between the electricity supplied through the electric grid and 20 the electricity generated by an eligible customer-generator and

fed back to the electric grid over a monthly billing period;

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provided that:

21

1	(1)	Net energy metering shall be accomplished using a
2		single meter capable of registering the flow of
3		electricity in two directions;
4	(2)	An additional meter or meters to monitor the flow of
5		electricity in each direction may be installed with
6		the consent of the customer-generator, at the expense
7		of the electric utility, and the additional metering
8		shall be used only to provide the information
9		necessary to accurately bill or credit the customer-
10		generator, or to collect solar, wind turbine, biomass,
11		or hydroelectric energy generating system performance
12		information for research purposes;
13	(3')	If the existing electrical meter of an eligible
14		customer-generator is not capable of measuring the
15		flow of electricity in two directions, the electric
16		utility shall be responsible for all expenses involved
17		in purchasing and installing a meter that is able to
18		measure electricity flow in two directions;
19	(4)	If an additional meter or meters are installed, the

net energy metering calculation shall yield a result

identical to that of a single meter; [and]

20

1	(5)	An eligible customer-generator who already owns an
2		existing solar, wind turbine, biomass, or
3		hydroelectric energy generating facility, or a hybrid
4		system consisting of two or more of these facilities,
5		is eligible to receive net energy metering service in
6		accordance with this part[-]; and
7	(6)	The electric utility shall not unreasonably deny,
8		burden, or delay net energy metering services upon
9		request by an eligible customer-generator of the
10		electric utility."
11	SECT	ION 3. Section 269-101.5, Hawaii Revised Statutes, is
12	amended t	o read as follows:
13	"[£]	§269-101.5[+] Maximum capacity of eligible customer-
14	generator	. The eligible customer-generator shall have a
15	capacity	of not more than [fifty] two hundred and fifty
16	kilowatts	[+] in 2008, five hundred kilowatts in 2009, and one
17	megawatt	thereafter; provided that the public utilities
18	commissio	n may increase the maximum allowable capacity that
19	eligible	customer-generators may have to an amount greater than
20	[fifty ki	lowatts] these amounts by rule or order."
21	SECT	ION 4. Section 269-102, Hawaii Revised Statutes, is
22	amended to	o read as follows:
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1 "§269-102 Standard contract or tariff; rate structure.
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- 2 (a) Every electric utility shall develop a standard contract or
- 3 tariff providing for net energy metering and shall make this
- 4 contract available to all eligible customer-generators [7] ten
- 5 kilowatts or less, and to all other eligible customer generators
- 6 above ten kilowatts upon request, on a first-come-first-served
- 7 basis until the time that the total rated generating capacity
- 8 produced by eligible customer-generators equals [.5] one per
- 9 cent of the electric utility's system peak demand[+] in 2008,
- 10 two per cent of the electric utility's system peak demand in
- 11 2009, and five per cent of the electric utility's system peak
- 12 demand in 2010; provided that the public utilities commission
- 13 may [increase,] modify by rule or order, the total rated
- 14 generating capacity produced by eligible customer-generators [to
- 15 an amount above .5 per cent of the electric utility's system
- 16 peak demand.], based on independent evaluation of the costs and
- 17 benefits of net energy metering to participating customers and
- 18 nonparticipating customers.
- 19 (b) Each net energy metering contract or tariff shall be
- 20 identical, with respect to rate structure, to the contract or
- 21 tariff to which the same customer would be assigned if the
- 22 customer was not an eligible customer-generator. The charges



- 1 for all retail rate components for eligible customer-generators
- 2 shall be based exclusively on the eligible customer-generator's
- 3 net kilowatt-hour consumption over a monthly billing period.
- 4 Any new or additional demand charge, standby charge, customer
- 5 charge, minimum monthly charge, interconnection charge, or other
- 6 charge that would increase an eligible customer-generator's
- 7 costs beyond those of other customers in the rate class to which
- 8 the eligible customer-generator would otherwise be assigned are
- 9 contrary to the intent of this section, and shall not form a
- 10 part of net energy metering contracts or tariffs.
- 11 (c) The public utilities commission may amend the rate
- 12 structure or standard contract or tariff by rule or order.]"
- 13 SECTION 5. Section 269-104, Hawaii Revised Statutes, is
- 14 amended to read as follows:
- 15 "§269-104 Additional customer-generators. Notwithstanding
- 16 section 269-102, an electric utility [is not obligated] may
- 17 choose to provide net energy metering to additional customer-
- 18 generators above ten kilowatts in its service area when the
- 19 combined total peak generating capacity of all eligible
- 20 customer-generators served by all the electric utilities in that
- 21 service area furnishing net energy metering to eligible
- 22 customer-generators equals [.5 per cent of the system peak

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1	demand of those electric utilities; the limitations specified	
2	in section 269-102(a); provided that the public utilities	
3	commission may [increase,] modify, by rule or order, the	
4	allowable percentage of the electric utility's system peak	
5	demand produced from eligible customer-generators in the	
6	electric utility's service area, whereupon the electric utility	
7	will be obligated to provide net energy metering to additional	
8	eligible customer-generators in that service area up to the	
9	increased percentage amount."	
10	SECTION 6. Section 269-105, Hawaii Revised Statutes, is	
11	amended to read as follows:	
12	"§269-105 Calculation. The net energy metering	
13	calculation shall be made by measuring the difference between	
14	the electricity supplied to the eligible customer-generator and	
15	(1) The electricity generated by the eligible customer-	
16	generator and fed back to the electric grid over a	
17	monthly billing period; and	
18	(2) Any unused <u>kilowatt-hour</u> credits for excess	
19	electricity from the eligible customer-generator	
20	carried over from previous months since the last	
21	twelve-month reconciliation period."	

1	SECTION 7. Section 269-106, Hawaii Revised Statutes, is
2	amended to read as follows:
3	"§269-106 Billing periods; twelve-month reconciliation.
4	(a) Billing of net energy metering customers shall be on a
5	monthly basis; provided that the last monthly bill for each
6	twelve-month period shall reconcile for that twelve-month period
7	the net electricity provided by the electric utility with:
8	(1) The electricity generated by the eligible customer-
9	generator and fed back to the electric grid over the
10	monthly billing period; and
11	(2) Any unused kilowatt-hour credits for excess
12	electricity from the eligible customer-generator
13	carried over from prior months since the last twelve-
14	month reconciliation period.
15	(b) [Credits] Kilowatt-hour credits for excess electricity
16	from the eligible customer-generator that remain unused after
17	each twelve-month reconciliation period may not be carried over
18	to the next twelve-month period."
19	SECTION 8. Section 269-107, Hawaii Revised Statutes, is

amended to read as follows:

1	"§269-107 Net electricity consumers. At the end of each
2	monthly billing period, where the electricity supplied during
3	the period by the electric utility exceeds:
4	(1) The electricity generated by the eligible customer-
5	generator during that same period; and
6	(2) Any unused kilowatt-hour credits for excess
7	electricity from the eligible customer-generator
8	carried over from prior months since the last twelve-
9	month reconciliation period,
10	the eligible customer-generator is a net electricity consumer
11	and the electric utility shall be owed compensation for the
12	eligible customer-generator's net kilowatt-hour consumption over
13	that same period. The compensation owed for the eligible
14	customer-generator's net monthly kilowatt-hour consumption shall
15	be calculated at the retail rate of the rate class the customer
16	is normally assigned to."
17	SECTION 9. Section 269-108, Hawaii Revised Statutes, is
18	amended to read as follows:
19	"§269-108 Net electricity producers; excess electricity
20	credits and credit carry over. At the end of each monthly
21	billing period, where the electricity generated by the eligible
22	customer-generator during the month exceeds the electricity

- 1 supplied by the electric utility during that same period, the
- 2 eligible customer-generator is a net electricity producer and
- 3 the electric utility shall retain any excess kilowatt-hours
- 4 generated during the prior monthly billing period; provided that
- 5 the excess electricity generated by the customer-generator, if
- 6 any, in each monthly billing period shall be carried over to the
- 7 next month as a [monetary] kilowatt-hour value to the credit of
- 8 the eligible customer-generator, which credit may accumulate and
- 9 be used to offset the compensation owed the electric utility for
- 10 the eligible customer-generator's net kilowatt-hour consumption
- 11 for succeeding months within each twelve-month period; provided
- 12 further that the electric utility shall reconcile the eligible
- 13 customer-generator's electricity production and consumption for
- 14 each twelve-month period as set forth in section 269-106. The
- 15 eligible customer-generator shall not be owed any compensation
- 16 for excess kilowatt-hours unless the electric utility enters
- 17 into a purchase agreement with the eligible customer-generator
- 18 for those excess kilowatt-hours."
- 19 SECTION 10. Section 269-111, Hawaii Revised Statutes, is
- 20 amended to read as follows:
- 21 "\$269-111 Safety and performance standards. (a) A solar,
- 22 wind turbine, biomass, or hydroelectric energy generating



- 1 system, or a hybrid system consisting of two or more of these
- 2 facilities, used by an eligible customer-generator shall meet
- 3 all applicable safety and performance standards established by
- 4 the National Electrical Code, the Institute of Electrical and
- 5 Electronics Engineers, and accredited testing laboratories such
- 6 as the Underwriters Laboratories and, where applicable, rules of
- 7 the public utilities commission regarding safety and
- 8 reliability.
- 9 (b) For systems of ten kilowatts or less, an eligible
- 10 customer-generator whose solar, wind turbine, biomass, or
- 11 hydroelectric energy generating system, or whose hybrid system
- 12 consisting of two or more of these facilities, meets the
- 13 standards and rules under subsection (a) shall not be required
- 14 to install additional controls, perform or pay for additional
- 15 tests, or purchase additional liability insurance.
- (c) For eligible customer-generator systems of greater
- 17 than ten kilowatts, the commission, either through decision and
- 18 order, by tariff adoption, or by rule, shall:
- 19 (1) Set forth safety, performance, and reliability
- standards and requirements; and
- 21 (2) Establish the qualifications for exemption from a
- requirement to install additional controls, perform or



1 pay for additional tests, or purchase additional 2 liability insurance. 3 (d) The public utilities commission shall initiate rulemaking proceedings by September 1, 2008, to adopt best 4 5 practices interconnection standards for solar, wind turbine, 6 biomass, or hydroelectric energy generating facilities. later than September 1, 2009, the commission shall adopt rules 7 8 pursuant to chapter 91 that incorporate best practices 9 interconnection standards. Upon adoption, the standards shall 10 become the interconnection requirements of each utility subject to the authority of the commission. As part of the rulemaking 11 12 process, the commission shall consider interconnection standards adopted within the previous twenty-four months by other states, 13 standards promulgated by the United States Federal Energy 14 Regulatory Commission, and model standards developed by 15 16 nonprofit organizations with the primary purpose of promoting 17 renewable energy." SECTION 11. This Act does not affect rights and duties 18 19 that matured, penalties that were incurred, and proceedings that 20 were begun, before its effective date. 21 SECTION 12. Statutory material to be repealed is bracketed

and stricken. New statutory material is underscored.

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1 SECTION 13. This Act shall take effect on June 1, 2025.

Report Title:

Public Utilities; Net Energy Metering

Description:

Increases that portion of an electric utility's total rated generating capacity produced by eligible customer-generators. Increases the maximum capacity of an eligible customer-generator. Requires the public utilities commission to adopt rules that incorporate best practices interconnection standards. Effective 6/1/2025. (HB2550 HD2)