NEIL ABERCROMBIE GOVERNOR

> RICHARD C. LIM DIRECTOR

MARY ALICE EVANS DEPUTY DIRECTOR



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Web site: www.hawaii.gov/dbedt Telephone: (808) 586-2355 Fax: (808) 586-2377

Statement of Richard C. Lim Director Department of Business, Economic Development, and Tourism before the HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION Tuesday, February 11, 2014 8:15 a.m. State Capitol, Conference Room 325

in consideration of HB 1543 RELATING TO NET ENERGY METERING.

Chairs Lee, Vice Chair Thielen, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) offers comments on HB 1543, which would require that the Net Energy Metering (NEM) program be changed to allow excess electricity credits to be carried over to the next twelve-month billing period and to provide eligible customer-generators the option of receiving compensation in lieu of a credit at the end of each twelve-month billing period.

DBEDT defers to the Public Utilities Commission on the regulatory aspects of this bill, and expresses its concern about this measure as it would usurp the PUC's authority to regulate Hawaii's electric utilities and set rates.

Thank you for the opportunity to offer these comments.

TESTIMONY OF HERMINA MORITA CHAIR, PUBLIC UTILITIES COMMISSION DEPARTMENT OF BUDGET AND FINANCE STATE OF HAWAII TO THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

FEBRUARY 11, 2014 8:15 a.m.

MEASURE: H.B. No. 1543 TITLE: Relating to Net Energy Metering

Chair Lee and Members of the Committee:

DESCRIPTION:

H.B. No. 1543 would amend Hawaii's Net Energy Metering Law at Section 269-106, Hawaii Revised Statutes ("HRS"), to require that excess credits for electricity generated by eligible customer-generators unused after a given twelve-month reconciliation period be carried over to the succeeding twelve-month reconciliation period. In addition, this measure amends HRS § 269-108 to require that electric utilities "make available to . . . eligible customer-generator[s] the option of receiving compensation in lieu of a credit for excess kilowatt-hours, at a rate to be determined by the public utilities commission."

POSITION:

The Public Utilities Commission ("Commission") has serious concerns with this measure and would like to offer the following comments for the Committee's consideration.

COMMENTS:

The Commission would like to point out some of the fundamental elements of Hawaii's Net Energy Metering Law and resulting program structures that would be affected by this bill's proposed amendments. First, net energy metering ("NEM") was established as a mechanism to encourage early adoption of distributed generation systems in the State, not a means to provide compensation for excess power generation by customer

H.B. No. 1543 Page 2

generators. As such, NEM is intended to net out a customer-generator's energy use and is not intended as a means to sell electricity to the electric utility.

The current NEM twelve-month reconciliation period is intended to account for seasonal variation during a given year and to encourage "right-sizing" of systems to match self-generation capacity with a customer's energy needs. H.B. No. 1543 is an economic incentive to "over-size," and, thus, over-invest in solar PV systems in order to create and monetize excess NEM credits. If this situation were to occur, it would further limit the pool of customers being able to access limited circuit and system capacity to interconnect distributed solar PV.

This bill has the adverse potential to further incentivize solar PV to the detriment of the development of a diverse portfolio of renewable energy resources and technologies the development of which may result in greater economic and reliability benefits for all electricity customers. The Commission is concerned the encouragement of over-investments in a single renewable energy resource by residential customers may be analogous to financial investment advice that encourages a single financial investment, rather than a diversified portfolio of financial investments.

Finally, combined with H.B. No. 1943,¹ this bill would further incentivize the exponential growth of distributed generation to be credited and compensated at full retail rates, which are higher than rates for other renewable resources available to electric utilities. This excess compensation would ultimately be subsidized, in whole or in part, by the electric utility ratepayers.

This situation would be totally unsustainable from both a technical standpoint (i.e., system safety and reliability) and an economic standpoint (i.e., fair allocation of costs to maintain and operate the grid) as the Commission works towards a fairer and more equitable framework where customers pay for the services they receive from the grid and are compensated fairly for the value of services they provide to the grid.

Thank you for the opportunity to testify on this measure.

¹H.B. No. 1943, H.D. 1, relating to the modernization of the Hawaii electric system, proposes to create a statutory right to interconnect and operate customer generation for all eligible customer-generators in Hawaii, in addition to requiring the Commission to open a proceeding to consider grid modernization issues.



NEIL ABERCROMBIE GOVERNOR

SHAN S. TSUTSUI LT. GOVERNOR STATE OF HAWAII OFFICE OF THE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS 335 MERCHANT STREET, ROOM 310 P.O. Box 541 HONOLULU, HAWAII 96809 Phone Number: 586-2850 Fax Number: 586-2856 www.hawaii.gov/dcca

KEALI`I S. LOPEZ DIRECTOR

JO ANN UCHIDA TAKEUCHI DEPUTY DIRECTOR

TO THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

THE TWENTY-SEVENTH LEGISLATURE REGULAR SESSION OF 2014

TUESDAY, FEBRUARY 11, 2014 8:15 A.M.

TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, TO THE HONORABLE CHRIS LEE, CHAIR, AND MEMBERS OF THE COMMITTEE

HOUSE BILL NO. 1543 - RELATING TO NET ENERGY METERING

DESCRIPTION:

This measure proposes to require credits for excess electricity that remain unused after each 12-month reconciliation period to be carried over to the next 12-month period. It further proposes to require the electric utility to make available to the eligible customer-generator the option of receiving compensation in lieu of credit for excess kilowatt-hours, at a rate to be determined by the Public Utilities Commission (Commission).

POSITION:

The Division of Consumer Advocacy (Consumer Advocate) supports the intent of this bill, but offers the comment that this bill may have the unintended consequence of

House Bill No. 1543 House Committee on Energy & Environmental Protection Tuesday, February 11, 2014, 8:15 a.m. Page 2

increasing the electricity rates for customers who are unable to install solar photovoltaic systems (solar pv).

COMMENTS:

The Consumer Advocate supports the intent of this bill to address the situation where customers, who installed (and will install) solar pv or other distributed generated systems, over-sized their systems and are self-generating electricity in excess of the 12-month carry-over credit that is allowed by statute. On the other hand, this bill that proposes to require the unused credits for excess energy after each 12-month reconciliation period to be carried over to the next 12-month period may have unintended consequences that may adversely affect other ratepayers.

A Net Energy Metering (NEM) customer is given a bill credit for self-generated electricity at full retail rates. NEM customers are still responsible for paying the minimum monthly service charge, which does not cover all of the utility's fixed costs. This means that a NEM customer does not pay his fair share of transmission and distribution costs in spite of the NEM customer remaining connected to the grid and relying upon the utility to deliver energy when the NEM system is not generating sufficient electricity to meet the customer's needs. These fixed costs that are not being covered by NEM customers are subsidized by the non-participating customers. Customers who are unable to self-generate electricity are low income homeowners, renters, high-rise condominium owners, and others whose rooftops are inappropriate for solar pv installation. This cross-subsidy places an unfair burden on many of those who can least afford it.

The purpose of allowing credits for excess energy to be limited to a 12-month period with all credits thereafter being forfeited to the utility was to encourage NEM customers to right-size their systems, so as to generate only as much energy as the customer would reasonably use. In this way, the cross-subsidy to non-participating customers is minimized.

This bill that proposes to require the carry-over of NEM credits beyond the 12-month reconciliation period or to be compensated for those credits has potential negative consequences. First customers may over-size their systems to take advantage of the carry-over credits. With circuits throughout the state reaching saturation levels, over-sized systems would further exacerbate the problem and potentially result in preventing a customer from being able to interconnect his system at reasonable costs. Second, over-sizing NEM systems will further take up capacity on the system that might be available for utility-scale systems that benefit all ratepayers.

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In a January, 2014 report by Energy+Environmental Economics (E3) entitled "Evaluation of Hawaii's Renewable Energy Policy and Procurement," it was determined that NEM systems are a costly form of renewable energy procurement that do not provide net value to all ratepayers. E3 stated that, "We find that customer-owned generators that sell energy to the system through NEM tariffs at full retail credit impose costs that exceed the avoided costs (the value to the system)."

This bill would certainly benefit all NEM customers, but the consequences to all customers needs to be taken into account by the legislature. Over-sized systems may even prevent the interconnection for a customer who wants to have a distributed generation system installed, because the over-sized systems have filled the capacity on a circuit.

Thank you for this opportunity to testify.

Testimony before the House Committee on Energy & Environmental Protection HB 1543 – Relating to Net Energy Metering By Carlos Perez Loriga Manager, Customer Solutions Department Hawaiian Electric Company, Inc.

Chair Lee, Vice-Chair Thielen and Members of the Committee:

My name is Carlos Perez Loriga. I am the Manager for the Customer Solutions Department at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric Company and its subsidiary utilities, Maui Electric Company and Hawaii Electric Light Company (Hawaiian Electric Companies).

The Hawaiian Electric Companies oppose House Bill 1543 relating to Net Energy Metering.

House Bill 1543 proposes to amend HRS Section 269-108 to allow credits for excess electricity that remain unused after each 12-month reconciliation period to be carried over to the next 12-month period. This bill also allows eligible Net Energy Metering customergenerators the option to receive compensation for credits for excess kilowatt-hours that remain unused after each twelve-month reconciliation period that would otherwise not be carried over to the next twelve-month period.

The net energy metering statute is clear in its intent to allow qualified customer-generators to offset their electricity usage by way of crediting excess electricity generation such that credits could be applied to energy charges during a 12-month period. Any credits that remain unused after each 12-month reconciliation period are not permitted to be carried over to the next twelve-month period. This 12-month reconciliation mechanism is a fundamental premise behind net energy metering as it discourages a customer-generator from oversizing their energy generating system.

We oppose House Bill 1543 because it would be inconsistent with a fundamental premise upon which net energy metering is based, which is to encourage the "right-sizing" of customers' energy generating systems to be used primarily to offset part or all of the customer's own electrical requirements. Oversizing of a customer-generator's system can lead to a reduction of grid access opportunities for other customers who do not currently own renewable energy systems but who may choose to in the future.

Furthermore, changes to net energy metering should be assessed comprehensively to ensure that there are no unintended consequences with broader impacts. For example, providing compensation for excess generation after the 12-month reconciliation period would also increase costs to non-net energy metering customers as it would result in the companies purchasing electricity at the prevailing retail rate (currently 34.7 cents per kWh on Oahu for a 600 kWh residential bill) that could otherwise be procured from less expensive grid scale solar and wind providers (at about 16 cents per kWh) or generated by the company at about 21 cents per kWh. Additionally, small distributed generators such as net energy metering systems are not utility controlled resources and they may displace other lower cost renewable energy during times when generation exceeds customer load requirements.

Lastly, there are other interconnection arrangements for customer-sited renewable generation, such as feed in tariff, that are designed to monetarily compensate a customergenerator for excess electricity generated.

We therefore ask that this bill be held.

Thank you for the opportunity to testify.

HB1543 Submitted on: 2/8/2014 Testimony for EEP on Feb 11, 2014 08:15AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments:

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<u>HB1543</u>

Submitted on: 2/10/2014

Testimony for EEP on Feb 11, 2014 08:15AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Walkey	Individual	Support	No

Comments:

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Hawaii Solar Energy Association Serving Hawaii Since 1977

Before the House Committee on Energy & Environmental Protection Tuesday, February 11, 2014, 8:15 a.m., room 325 HB 1543: RELATING TO NET ENERGY METERING

Aloha Chair Lee, Vice-Chair Thielen, and members of the House Committee on Energy & Environmental Protection,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify in support for HB 1543, which requires credits for excess electricity that remain unused after each 12-month reconciliation period to be carried over to the next 12-month period, and to make available to the eligible customer generator the option of receiving compensation in lieu of credit for excess energy, at a rate determined by the PUC. HSEA is a non-profit trade organization that has been advocating for solar energy since 1977, with an emphasis on residential distributed generation and commercial for both solar hot water (SHW) and photovoltaics (PV). We currently represent 79 companies, which employ thousands of local employees working in the solar industry. With 37 years of advocacy behind us, HSEA's goal is to work for a sustainable energy future for all of Hawaii.

In a perfect world, customers who invest in self-generation would have a system that was perfectly designed and sized to meet that customer's load so that the customer would never lose generation credit at the end of the 12 month reconciliation period. Although most systems are carefully sized to produce the right amount of electricity for the customer's needs, a customer's electrical load can and does shift, and under the current NEM statute, any excess generation would be lost. For instance, if a customer retrofitted the home with more efficient appliances, the load would go down, and a solar system sized to the old load would now overproduce and credits would be lost. As such, the current NEM statute does not encourage customers to use less electricity, and this seems counter to the overall spirit of our energy efficiency and distributed generation policies.

HB 1543 corrects this built-in incentive to not become more efficient by allowing customers who might overproduce at some point to have their credits carry over to the next year. In addition, this bill allows customers to choose to receive compensation in lieu of a credit, at a rate determined by the PUC. The state of renewables in Hawaii is currently in flux, and HB 1543 supports a more flexible NEM program.

Thank you for the opportunity to testify.

Leslie Cole-Brooks Executive Director Hawaii Solar Energy Association