DAVID Y. IGE
GOVERNOR

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CATHERINE P. AWAKUNI COLÓN
DIRECTOR

JO ANN M. UCHIDA TAKEUCHI
DEPUTY DIRECTOR

TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

THE TWENTY-EIGHTH LEGISLATURE
REGULAR SESSION OF 2016

WEDNESDAY, FEBRUARY 24, 2016
2:05 P.M.

TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, TO THE HONORABLE ANGUS L.K. McKELVEY, CHAIR, AND MEMBERS OF THE COMMITTEE

HOUSE BILL NO. HB 1823, H.D. 1 - RELATING TO NET ENERGY METERING

DESCRIPTION:

This measure proposes to increase capacity limits on net energy metering and establish excess energy volumes for systems installed after June 30, 2016.

POSITION:

The Division of Consumer Advocacy ("Consumer Advocate") opposes this bill.

COMMENTS:

The Public Utilities Commission ("PUC") and dozens of stakeholders have been immersed in the PUC's Distributed Energy Resources ("DER") docket for months, and the relevant preceding dockets for years before that. Last October, the PUC issued a decision and order in Phase I of the DER docket, declaring the net energy metering program fully subscribed for the Hawaiian Electric Companies, as the program has been on Kauai for several years. The PUC determined that the net energy metering program had served its intended purpose, but also that the program was no longer sending the appropriate price signals to the market. In the place of net metering, which compensated for energy exported to the grid at the retail rate, the PUC's Phase I decision and order created a self-supply tariff and a grid-supply tariff. The former limits the capacity of individual participating systems at 100 kilowatts, but does not limit total

participation in the program. The latter limits total participation in the program to twenty-five megawatts on Oahu and five megawatts each in the Maui Electric and Hawaii Electric Light service territories. Also, it compensates for energy exported to the grid at a rate close to the estimated avoided cost of generation.

After the PUC issued its Phase I decision and order, parties to the docket promptly commenced further proceedings to work on long-term policy proposals in Phase II. In those ongoing technical meetings for Phase II, the parties are studying the hosting capacities for distributed generation on the Hawaiian Electric grids, at both the distribution circuit levels and system levels. They are also studying the value of energy exported to the grid.

This bill would undermine the interim policies that the PUC put forward in its decision and order in Phase I to deal with urgent issues. The grid's ultimate capacity for distributed generation will be best addressed by the work already underway in Phase II of the DER docket, as will a careful determination of the value of energy exported to the grid. If this bill were enacted, would the PUC have to interrupt current proceedings and reconsider the issues for Phase II? Or would the parties to the DER docket have to abandon current work on Phase II entirely and revisit Phase I?

Thank you for this opportunity to testify.

DAVID Y. IGE
GOVERNOR

KATHRYN S. MATAYOSHI
SUPERINTENDENT

STATE OF HAWAI`I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI`I 96804

Date: 02/24/2016
Time: 02:05 PM
Location: 325
Committee: House Consumer Protection and Commerce

Department: Education

Person Testifying: Kathryn S. Matayoshi, Superintendent of Education

Title of Bill: HB 1823, HD1 RELATING TO NET ENERGY METERING.

Purpose of Bill: Increases customer-generator capacity limits on net energy metering (NEM) and sets the value of electricity generated by qualified customer-generators and fed back to the electric grid at a rate determined each year by the Public Utilities Commission (PUC).

Department's Position:
The Department of Education (DOE) supports the intent of H.B. No. 1823, HD1.

The amendments to Part VI of Chapter 269, Hawaii Revised Statutes, proposed in H.B. No. 1823 will allow the DOE to build larger photo voltaic (PV) systems at schools (from the current 100 kilowatts authorized by the PUC to 1 megawatt).

Larger PV systems would assist the DOE to meet its goal of utilizing 90 percent clean energy by the year 2040 and address the long term trend of higher electricity bills, especially with the on-going effort to install air conditioners in more of our classrooms.

Thank you for this opportunity to testify on this measure.

DAVID Y. IGE
GOVERNOR

LUIS P. SALAVERIA
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of
LUIS P. SALAVERIA
Director
Department of Business, Economic Development, and Tourism
before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Wednesday, February 24, 2016
2:05 p.m.
State Capitol, Conference Room 325

in consideration of
HB 1823, HD1

RELATING TO NET ENERGY METERING.

Chair McKelvey, Vice Chair Woodson, and Members of the Committee.

The Department of Business, Economic Development & Tourism (DBEDT) offers comments on HB 1823, HD1, relating to Net Energy Metering (NEM). The bill increases capacity limits on NEM and establishes excess energy volumes for systems installed after June 30, 2016.

The Public Utilities Commission (PUC) is conducting an ongoing investigation into distributed energy resource ("DER") policies. Decision and Order No. 33258 ("Order N. 33258") in Docket N. 2014-0192 capped the existing NEM program and adopted interim solutions to allow the market to advance while Phase II of the proceeding is underway. Phase II looks to further explore the technical solutions and long run pricing structure that will allow DER to be adopted sustainably to the benefit of all customers. In Phase II, technical meetings have been held analyzing hosting capacity at the distribution circuit level as well as the system level. The appropriate compensation for energy services provided to and from the grid is also a focus for study in Phase II. DBEDT supports maintaining the momentum in the current DER docket as a means to address the issues raised in Section 1 of this measure. We are concerned the transition to a sustainable DER market structure could be delayed by revisiting decisions that were the subject of the DER Docket in which the PUC has already issued decisions.

Thank you for the opportunity to offer these comments regarding HB 1823, HD1.

TESTIMONY OF RANDY IWASE
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII
TO THE
HOUSE COMMITTEE ON
CONSUMER PROTECTION AND COMMERCE

February 24, 2016
2:05 PM

MEASURE: H.B. No. 1823, H.D. 1
TITLE: RELATING TO NET ENERGY METERING

Chair McKelvey and Members of the Committee:

DESCRIPTION:

This measure increases the generating capacity cap for an eligible customer generator participating in the Net Energy Metering ("NEM") program from 50 KW to 1MW. This measure also increases the total system capacity limit on NEM to "the aggregate amount of the generating capacity that could be interconnected with the utility's electric system without substantial expenditure by the utility for new mitigation facilities to maintain reliability of electric service." Finally, this measure requires that excess energy provided by an eligible customer generator interconnected after June 30, 2016 be valued at "a rate, to be determined for each calendar year by the public utilities commission, that reflects the value of such electricity to the utility, ratepayers, and the public as measured by avoided capacity costs, avoided operating and maintenance costs, avoided fuel costs, and avoided environmental costs."

POSITION:

The Public Utilities Commission ("Commission") offers the following comments for the Committee's consideration.

COMMENTS:

In the Commission's ongoing investigation into distributed energy resource ("DER") policies the Commission issued Decision and Order No. 33258 ("Order No. 33258") in Docket No. 2014-0192 which capped the existing NEM program to address the same issues raised in Section 1 of this measure. When Net Energy Metering was established in Hawaii nearly 20 years ago, it was designed to be a simple, efficient way to encourage customers to become early-adopters of solar PV and other renewable energy technologies.

Over time, the Commission has encouraged participation in the NEM program to increase far beyond the original cap on the NEM program. Today, almost 80,000 customers across the state have installed solar PV, representing nearly 20% of all customers statewide. This level of solar PV adoption is more than 10 times the number of solar PV systems per customer of mainland utilities, and 60 times higher than the initial cap on net metering systems established by the Legislature in 2001. The solar PV industry in Hawaii has grown far beyond the early-adopter stage.

Net Metering has succeeded in supporting rooftop solar as the industry has matured. However, the NEM program was not designed for the scale of adoption experienced today and policies must evolve to meet changing customer and utility system needs. As the Commission observed, "the challenge facing the State today is ensuring that [rooftop PV and other distributed resources] continue to scale in such a way that [they] benefit ***all*** customers as each utility transitions to 100% renewable energy."

Sustained Growth of Solar and Renewable Energy Requires New Policies

Finite Grid Capacity for Daytime Energy

Hawaii's electric grids can only absorb a finite amount of energy during the middle of the day when solar systems are at their maximum output. To increase the amount of solar energy the grid can handle, the state's electric utilities are adjusting their operations to bring more renewable energy onto the grid, while still maintaining safe and reliable delivery of electricity to customers. At the same time, owners of solar PV and other renewable energy systems will need to use advanced technologies to help support the grid and deliver energy when it is needed most, not just when the sun is shining or the wind is blowing.

Advanced Technologies Required to Reach Higher Levels of Solar and Renewables

To help support the grid and encourage delivery of energy when it is needed most, customers will increasingly need to use energy storage and demand "flexibility" technologies to better align solar output with customer demand. By providing use of the grid as a free storage device, net metering provides limited incentive for customers to adopt these new technologies. As Hawaii's energy system evolves, electricity prices must send the right signals to customers about what technologies and services are valuable to the grid, and when they are needed.

Costs of Solar Continue to Decline Significantly

Net Metering requires electric utilities to pay the retail rate for delivered energy, regardless of the cost of solar panels or the value of energy delivered to the grid. This arrangement was simple and necessary when the cost of solar was significantly higher than conventional energy sources. In the years since, the cost of solar panels has plummeted, and recent solicitations for utility-scale solar projects in Hawaii have yielded declining prices for renewable energy (13.5-14.5 cents/kWh on Oahu, 11 cents/kWh on Maui, and 14.5 cents per kWh for a dispatchable solar/storage system on Kauai). Net Metering does not allow the flexibility to adapt compensation rates as the cost of renewables declines and this limitation prevents all customers from sharing in the benefits of lower cost renewable energy.

Evolution to DER 2.0 – Menu of Customer Choices for Distributed Energy Resources

In Order No. 33258, the Commission began an evolution from Net Metering to redesigned, market-based rates for energy delivered to the grid. All existing and pending NEM customers were grandfathered into the NEM program. The Commission ordered the Hawaiian Electric Companies to offer three new options for their customers: Grid Supply, Self-Supply, and a redesigned Time-of-Use rate to encourage daytime energy use. These new options are interim, transitional programs that will 1) allow customers to be fairly compensated for investing in rooftop PV and other renewables, 2) encourage customers to invest in new technologies like energy storage, and 3) ensure that going forward, these systems have the technical capabilities to support the grid during emergencies.

In addition, the Commission has ordered the HECO Companies to offer a re-designed Demand Response program, which will allow customers more options to control their energy use and be compensated for providing essential grid services to the utility.

Thank you for the opportunity to testify on this measure.

Testimony before the
House Committee on Consumer Protection & Commerce

H.B. 1823, H.D. 1 – Relating to Net Energy Metering

February 23, 2016, 2:05pm

By Ka‘iulani Shinsato
Director, Distributed Energy Resources Programs
Hawaiian Electric Company, Inc.

Chair McKelvey, Vice-Chair Woodson, and Members of the Committee:

My name is Ka‘iulani Shinsato. I am the Director of the Distributed Energy Resources Programs Division at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric Company and its subsidiary utilities, Maui Electric Company and Hawai‘i Electric Light Company (Hawaiian Electric Companies).

The Hawaiian Electric Companies oppose House Bill 1823, H.D. 1 relating to Net Energy Metering (“NEM”).

House Bill 1823, H.D. 1 amends several sections of the NEM Law in Hawai‘i Revised Statutes (“HRS”) §§ 269-101 -111. However, the NEM program is now closed. By Decision and Order issued on October 12, 2015, in Docket No. 2014-0192 -- the Public Utilities Commission’s (“PUC”) investigatory proceeding on Distributed Energy Resources (“DER”) -- the PUC closed the NEM program effective the date of the Decision and Order.

The PUC’s Decision and Order was based on a full record, after many months of evaluating technical, economic, and policy issues associated with rooftop solar, in a proceeding involving multiple stakeholders. In its ruling, the PUC acknowledged that NEM has been an extraordinary success in Hawai‘i, but also determined, after a comprehensive investigation, that a transition away from NEM is essential to ensure all customers benefit from continued growth in distributed energy, not just those who have

the ability to install solar PV or other forms of DER. This ruling is consistent with the decision of Kauai Island Utility Cooperative to close its NEM program several years ago. One of the primary reasons why the Companies supported closure of NEM in the DER docket was because NEM was resulting in a shift of fixed utility costs from PV customers to non-PV customers.

The Commission approved new rooftop PV programs to replace NEM that will continue to allow customers to add rooftop solar, but in a manner that is fair and sustainable to all customers. Thus, deference should be given to the PUC's Decision and Order, which took the first step in evolving DER programs from the NEM program to two new DER programs after careful review of diverse stakeholder interests in Phase 1 of the DER proceeding.

In addition, the proposed legislation appears to assume that NEM continues in its present form until June 30, 2016. However, in compliance with the Commission's Decision and Order, the Companies have already implemented the two new DER programs, and no longer offer the NEM program to new customers.

Moreover, even assuming the NEM program is re-opened, the proposal to expand the eligible system size under NEM to 1 megawatt under the proposed legislation is unreasonable and contravenes the intent of the NEM statute. As set forth in the NEM statute in Hawai'i Revised Statutes ("HRS") 269-101, NEM was designed to allow a customer to *offset* their load, and was *not* intended to compensate customers for all of their exported generation, such as through a Feed-In Tariff.

Finally, even assuming the NEM program is re-opened, in many respects, the proposed legislation would overlap or potentially conflict with the efforts of the PUC and the parties in Phase 2 of the DER docket. In Phase 1 of the DER docket, the PUC established broad reforms through a collaborative process that will support sustainable growth in the market for rooftop solar PV and other DER desired by Hawai'i's residents and businesses. The reforms established by the Commission will: (1) promote rapid

adoption of the next generation of solar PV and other distributed energy technologies, (2) encourage more competitive pricing of DER systems, (3) lower overall energy supply costs for all customers, and (4) help to manage each island grid's scarce capacity.

In Phase 2 of the DER docket, the PUC will focus on further developing competitive markets for DER in Hawai'i. As stated by the PUC, the PUC will closely monitor the progress of the state's electric utilities as they move towards 100% renewable energy and will take further action to ensure the state's electric utilities continue to reduce costs to customers while ensuring the safety and reliability of each island grid.

More specifically, in Phase 2 of the DER docket, the PUC is expected to rule on the Companies' proposed system and circuit hosting capacity analyses, which pertain to the provision in the proposed legislation that requires DER limits to be set based on "the aggregate amount of the generating capacity that could be interconnected with the utility's electric system without substantial expenditure by the utility for new mitigation facilities to maintain reliability of electric service." Phase 2 is also expected to address another major provision in the proposed legislation -- the value of electricity generated by customers and fed back to the electric grid. The Companies respectfully submit that such determinations are better off left before the appropriate regulatory body, the PUC, where it can build upon the record already developed, and decisions already made, in Phase 1 of the DER proceeding.

For all of these reasons, we ask that this bill be held.

Thank you for the opportunity to testify.

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Testimony of ERIK KVAM
Director of Renewable Energy Action Coalition of Hawaii
e-mail: Erik.Kvam@REACHawaii.org

In SUPPORT of HB 1823 HD 1 RELATING TO NET ENERGY METERING

Before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Wednesday, February 24, 2016 2:05 p.m.

Aloha, Chair McKelvey, Vice-Chair Woodson and members of the Committee.

My name is Erik Kvam. I am a Director of Renewable Energy Action Coalition of Hawaii (REACH). REACH is a trade association whose vision is a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii.

REACH is in **SUPPORT** of **HB 1823 HD 1**.

Under NEM, utility customers generate clean renewable energy for their own use and send their excess renewable energy to the grid for use by other utility customers.

The PUC noticed that, under the utility's NEM program, the excess energy sent to the grid was being given an arbitrarily high value. The arbitrarily high value meant that NEM customers were gaining wealth at the expense of non-NEM customers.

The PUC dealt with the transfer of wealth issue by mistakenly setting an arbitrarily low value for the excess energy sent to grid. The PUC's mistake is closing the market for excess renewable energy sent to the grid. The PUC's mistake is putting as many as a thousand people out of work.

What the bill does:

- Corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by valuing excess renewable energy sent to the grid at a rate "that reflects the value of such electricity to the utility, ratepayers and the public as measured by avoided capacity costs, avoided operating and maintenance costs, avoided fuel costs and avoided environmental costs" (the Value of Renewable or "VOR" rate)

- PUC annually determines the Value of Renewable rate

- Increases the NEM system capacity limit from 50 kW to 1 MW

- Increases the NEM aggregate capacity limit from ½ % of peak demand to the aggregate amount of such capacity that could be interconnected with the utility's electric system without substantial expenditure, as may be determined by the commission, by the utility for new mitigation facilities to maintain reliability of electric service

- Prohibits the utility from assessing interconnection requirements study charges and supplemental review charges against NEM customers

Summary:

The bill corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by requiring that the HECO utilities value excess energy sent to the grid at a rate, determined by the PUC, that reflects the true economic value of such energy to ***all*** customers and to the general public.

NEM needs to be expanded -- by raising capacity limits and by prohibiting discriminatory charges to NEM customers -- because Hawaii needs all the low-cost, decentralized, grid-connected renewable generation it can get for the day when imported fuels stop flowing to Hawaii.

Thank you for allowing me to testify.

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Alan Lennard, Managing Director
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Testimony of Alan Lennard
Managing Director of Green Power Projects LLC
e-mail: alan.lennard@greenpowerprojects.com

In SUPPORT of HB 1823 HD 1 RELATING TO NET ENERGY METERING
Before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Wednesday, February 24, 2016 2:05 p.m.

Aloha, Chair McKelvey, Vice-Chair Woodson and members of the Committee.

My name is Alan Lennard. I am the Managing director of Green Power Projects LLC and a Director of Renewable Energy Action Coalition of Hawaii (REACH). Green Power Projects LLC is a Solar project facilitation company working towards 100% Renewable Energy capacity in Hawaii. REACH is a trade association whose vision is a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii.

We are in Complete **SUPPORT** of **HB 1823 HD 1**.

Under NEM, utility customers generate clean renewable energy for their own use and send their excess renewable energy to the grid for use by other utility customers.

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- Prohibits the utility from assessing interconnection requirements study charges and supplemental review charges against NEM customers

Summary:

The bill corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by requiring that the HECO utilities value excess energy sent to the grid at a rate, determined by the PUC, that reflects the true economic value of such energy to ***all*** customers and to the general public.

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Thank you for allowing me to testify.

Alan Lennard –dig signature

Alan Lennard
Managing Director
Green Power Projects LLC
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Haleiwa, HI 96712-0818

COLLEGE OF SOCIAL SCIENCES
HAWAII ENERGY POLICY FORUM
UNIVERSITY OF HAWAI'I AT MĀNOA

Testimony of the
Hawaii Energy Policy Forum
Before the
House Committee on Consumer Protection and Commerce
Wednesday, February 24, 2016 at 2:05 pm in Conference Room 325

Opposes HB 1823 HD1, Relating to Net Energy Metering

Chair McKelvey, Vice-Chair Woodson, and Members of the Committee,

The Hawaii Energy Policy Forum ("HEPF"), created in 2002, is comprised of over 40 representatives from Hawaii's electric utilities, oil and natural gas suppliers, environmental and community groups, renewable energy industry, and federal, state and local government, including representatives from the neighbor islands. Our vision, mission and comprehensive "10 Point Action Plan" guide us in moving Hawaii toward its preferred energy goals and our recommendation to oppose bill HB1823 HD1 for the following reasons:

Currently, the Hawaii Public Utility Commission (PUC) is in the midst of its distributed energy resources investigation (Docket No. 2014-0192), which included a decision and order issued in October 2015 to end net energy metering (NEM) and to replace it with two other types of tariffs until it completes its highly technical proceedings to determine the best way to integrate additional distributed renewable resources.

This bill will override many of the technical and economic findings culminating in the PUC's decision and order to end NEM, and considers neither the cost impacts on electricity rate payers who do not have access to a rooftop photovoltaic system (pv) nor the reliability of Hawaii's electric systems.

Net energy metering (NEM) was a program to encourage early adoption of renewable energy in its infancy. When the statute was amended in 2001 it was recognized that NEM would need to be reviewed periodically. Therefore, a NEM system cap (.5% of system peak) was established and later the law was further amended to allow the PUC to review and change the program if and when necessary.

The HEPF supports allowing the PUC to continue its ongoing process to redesign the NEM program to one based on market rates for distributed energy resources where all participants pay for the value they receive and are compensated for the value they contribute.

Thank you for the opportunity to testify.

This testimony reflects the position of the Forum as a whole and not necessarily of the individual Forum members or their companies.

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Testimony of Laurence Ponce
RME of Solar Services Hawaii
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In SUPPORT of HB 1823 HD 1 RELATING TO NET ENERGY METERING
Before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Wednesday, February 24, 2016 2:05 p.m.

Aloha, Chair McKelvey, Vice-Chair Woodson and members of the Committee.

My name is Laurence Ponce. I am RME of Solar Services Hawaii. and a Member of Renewable Energy Action Coalition of Hawaii (REACH). Grand Solar is a Solar installation company working towards 100% Renewable Energy capacity in Hawaii. REACH is a trade association whose vision is a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii.

We are in Complete **SUPPORT** of **HB 1823 HD 1**.

Under NEM, utility customers generate clean renewable energy for their own use and send their excess renewable energy to the grid for use by other utility customers.

The PUC noticed that, under the utility's NEM program, the excess energy sent to the grid was being given an arbitrarily high value. The arbitrarily high value meant that NEM customers were gaining wealth at the expense of non-NEM customers.

The PUC dealt with the transfer of wealth issue by mistakenly setting an arbitrarily low value for the excess energy sent to grid. The PUC's mistake is closing the market for excess renewable energy sent to the grid. The PUC's mistake is putting as many as a thousand people out of work.

What the bill does:

- Corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by valuing excess renewable energy sent to the grid at a rate "that reflects the value of such electricity to the utility, ratepayers and the public as measured by avoided capacity costs, avoided operating and maintenance costs, avoided fuel costs and avoided environmental costs" (the Value of Renewable or "VOR" rate)
- PUC annually determines the Value of Renewable rate
- Increases the NEM system capacity limit from 50 kW to 1 MW
- Increases the NEM aggregate capacity limit from ½ % of peak demand to the aggregate amount of such capacity that could be interconnected with the utility's electric system without substantial expenditure, as may be determined by the commission, by the utility for new mitigation facilities to maintain reliability of electric service
- Prohibits the utility from assessing interconnection requirements study charges and supplemental review charges against NEM customers

Summary:

The bill corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by requiring that the HECO utilities value excess energy sent to the grid at a rate, determined by the PUC, that reflects the true economic value of such energy to ***all*** customers and to the general public.

NEM needs to be expanded -- by raising capacity limits and by prohibiting discriminatory charges to NEM customers -- because Hawaii needs all the low-cost, decentralized, grid-connected renewable generation it can get for the day when imported fuels stop flowing to Hawaii.

Thank you for allowing me to testify.

Laurence Ponce – dig signature

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Testimony of ERIK KVAM
Director of Renewable Energy Action Coalition of Hawaii
e-mail: Erik.Kvam@REACHawaii.org

In SUPPORT of HB 1823 HD 1 RELATING TO NET ENERGY METERING

Before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Wednesday, February 24, 2016 2:05 p.m.

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My name is Erik Kvam. I am a Director of Renewable Energy Action Coalition of Hawaii (REACH). REACH is a trade association whose vision is a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii.

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- Increases the NEM system capacity limit from 50 kW to 1 MW

- Increases the NEM aggregate capacity limit from ½ % of peak demand to the aggregate amount of such capacity that could be interconnected with the utility's electric system without substantial expenditure, as may be determined by the commission, by the utility for new mitigation facilities to maintain reliability of electric service

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Summary:

The bill corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by requiring that the HECO utilities value excess energy sent to the grid at a rate, determined by the PUC, that reflects the true economic value of such energy to ***all*** customers and to the general public.

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Thank you for allowing me to testify.

Hawaii Solar Energy Association
Serving Hawaii Since 1977

**TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION
IN REGARD TO HB 1823 HD 1, RELATING TO NET ENERGY METERING
BEFORE THE
HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE
ON
WEDNESDAY, FEBRUARY 24, 2016**

Chair McKelvey, Vice-Chair Woodson and members of the committee, my name is Hajime Alabanza, and I represent the Hawaii Solar Energy Association, Inc. (HSEA)

HSEA strongly supports HB 1823 HD 1 with comments. The measure amends §269 101-110 to encourage the development of renewable energy in Hawaii by adjusting the cap on net metering and specifying the way in which energy generated by renewables is valuated.

Since the dissolution of NEM in October of 2015 by the Public Utilities Commission of Hawaii, homeowners wishing to install grid connected solar systems on their homes have been given two new options: Customer grid-supply (CGS) and customer self-supply (CSS). The HEI companies release a weekly report on the amount of applications for various grid tie methods for all solar systems submitted for permitting and their respective position in the queue. Since the October NEM decision, the numbers in this report have stagnated.

In HECO's October 13th Press Release in response to the PUC decision, they state "The decision is the result of the first phase of the PUC's effort to develop long-term technical and policy solutions that will support the continued growth of rooftop PV in Hawaii." Since October, only 1 new application has been approved for installation. Additionally, the length of the previous NEM agreement was around 3 pages, while the new CGS application is 42 pages long and requires a manual to complete.

Very little CGS and CSS applications filed with the HEI companies on any of the participating islands have passed the technical review. Many of HSEA's member companies that sell or install solar systems have had almost 100% of their CGS applications kicked back to them for revision for minor things such as blank fields instead of N/A.

Furthermore, the new CGS rate model significantly decreases the return on investment of an individual solar system, making the systems more cost prohibitive for consumers and unfairly pressuring the market. In a recent Hawaii PUC press release, Chair Randall Iwase expressed disappointment in "The slow progress by the HECO Companies to approve and connect customers that have signed up for new rooftop solar under the grid-supply option" and that "these events send the wrong message to third party developers

that desire to compete for clean energy business opportunities in Hawaii, and appear to represent a step backwards from the State's clean energy goals."

There also exists a need to correctly and fairly value excess electricity generated by a consumer-generator. The current rate structure for the new CGS program sets the rate at $0.1507/kWh, approximately half of the old NEM rate. This rate will be reexamined every two years, as opposed to being adjusted as needed for energy market fluctuations. Given the current CGS rate structure, it is very difficult to properly size a solar system that will provide the maximum benefit to the customer.

Within HB 1823 HD 1 at §269-102 on page 5 there is language pertaining to the interconnection of customer energy generators to the utility's electric grid. Special consideration should be given to how the utility and the PUC determine the ability of the electric grid to accept interconnected systems. As Dr. Steven Chu, former United States Secretary or Energy, predicted and based on recent NREL test results, the real world applications on Kauai, Australia, New Zealand, and Germany have proven that there is no justifiable reason an applicant should be denied a new NEM agreement for oversaturation or grid reliability issues within the confines of this statute. The utility should provide accurate and compelling evidence for denial, with possible review by a third party.

Thank you for the opportunity to testify.

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John Grandinetti
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Testimony of John Grandinetti
President of
e-mail: grandsolar808@gmail.com

In SUPPORT of HB 1823 HD 1 RELATING TO NET ENERGY METERING
Before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Wednesday, February 24, 2016 2:05 p.m.

Aloha, Chair McKelvey, Vice-Chair Woodson and members of the Committee.

My name is John Grandinetti. I am the President of Grand Solar Inc. and a Member of Renewable Energy Action Coalition of Hawaii (REACH). Grand Solar is a Solar installation company working towards 100% Renewable Energy capacity in Hawaii. REACH is a trade association whose vision is a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii.

We are in Complete **SUPPORT** of **HB 1823 HD 1**.

Under NEM, utility customers generate clean renewable energy for their own use and send their excess renewable energy to the grid for use by other utility customers.

The PUC noticed that, under the utility's NEM program, the excess energy sent to the grid was being given an arbitrarily high value. The arbitrarily high value meant that NEM customers were gaining wealth at the expense of non-NEM customers.

The PUC dealt with the transfer of wealth issue by mistakenly setting an arbitrarily low value for the excess energy sent to grid. The PUC's mistake is closing the market for excess renewable energy sent to the grid. The PUC's mistake is putting as many as a thousand people out of work.

What the bill does:

- Corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by valuing excess renewable energy sent to the grid at a rate "that reflects the value of such electricity to the utility, ratepayers and the public as measured by avoided capacity costs, avoided operating and maintenance costs, avoided fuel costs and avoided environmental costs" (the Value of Renewable or "VOR" rate)
- PUC annually determines the Value of Renewable rate
- Increases the NEM system capacity limit from 50 kW to 1 MW
- Increases the NEM aggregate capacity limit from ½ % of peak demand to the aggregate amount of such capacity that could be interconnected with the utility's electric system without substantial expenditure, as may be determined by the commission, by the utility for new mitigation facilities to maintain reliability of electric service
- Prohibits the utility from assessing interconnection requirements study charges and supplemental review charges against NEM customers

Summary:

The bill corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by requiring that the HECO utilities value excess energy sent to the grid at a rate, determined by the PUC, that reflects the true economic value of such energy to ***all*** customers and to the general public.

NEM needs to be expanded -- by raising capacity limits and by prohibiting discriminatory charges to NEM customers -- because Hawaii needs all the low-cost, decentralized, grid-connected renewable generation it can get for the day when imported fuels stop flowing to Hawaii.

Thank you for allowing me to testify.

John Grandinetti – dig signature

John Grandinetti
President
Grand Solar Inc.

INTER-ISLAND SOLAR SUPPLY

761 Ahua St.	Honolulu, HI	96819	Oahu	Tel: (808) 523-0711	Fax: (808) 536-5586
73-5569 Kauhola St.	Kailua-Kona, HI	96740	West Hawai'i Island	Tel: (808) 329-7890	Fax: (808) 329-5753
16-206 Wiliama St.	Keaau, HI	96749	East Hawai'i Island	Tel: (808) 935-0948	Fax: (808) 498-4606
400 Ala Makani St. #103	Kahului, HI	96732	Maui	Tel: (808) 871-1030	Fax: (808) 873-7825
1764 Haleukana St.	Lihue, HI	96766	Kauai	Tel: (808) 378-4080	Fax: (808) 378-4078

TESTIMONY OF INTER ISLAND SOLAR SUPPLY
IN REGARD TO HB 1823 HD 1, RELATING TO NET ENERGY METERING
BEFORE THE
HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE
ON
WEDNESDAY 24, 2016

Chair McKelvey, Vice-Chair Woodson and members of the committee, my name is Richard Reed and I represent Inter Island Solar Supply.

Inter-Island Solar Supply strongly supports HB 1823 with comments. The measure amends §269 101-110 to encourage the development of renewable energy in Hawaii by adjusting the cap on net metering and specifying the way in which energy generated by renewables is valuated.

Since the dissolution of NEM in October of 2015 by the Public Utilities Commission of Hawaii, homeowners wishing to install grid connected solar systems on their homes have been given three new options: Customer grid-supply (CGS), customer self-supply (CSS), and time-of use (TOU). The HEI companies release a weekly report on the amount of applications for various grid tie methods for all solar systems submitted for permitting and their respective position on the queue. Since the October NEM decision, the numbers in this report have stagnated. Essentially, not a single CGS or CSS application filed with the HEI companies on any of the participating islands has passed the technical review. Many of Inter Island's customers have had almost 100% of their CGS applications kicked back to them for revision. The new options for interconnection are unnecessarily cumbersome and expensive.

Furthermore, the new CGS rate model significantly decreases the return on investment of an individual solar system, making the systems more cost prohibitive for consumers. In HECO's October 13 th Press Release in response to the PUC decision, they state "The decision is the result of the first phase of the PUC's effort to develop long-term technical and policy solutions that will support the continued growth of rooftop PV in Hawaii." Since October, not a single new application has been approved for installation. Additionally, the length of the previous NEM agreement was around 3 pages, while the new CGS application is over 30 pages long and requires a manual to complete.

In fact, in a recent Hawaii PUC press release, Chair Randall Iwase expressed disappointment in "The slow progress by the HECO Companies to approve and connect customers that have signed up for new rooftop solar under the grid-supply option" and that "these events send the wrong message to third party developers that desire to compete for clean energy business opportunities in Hawaii, and appear to represent a step backwards from the State's clean energy goals."

Additionally, there is concern that the language within sections of this bill is vague and too open to interpretation. Specifically, at page 6 lines 19-20 and page 8 lines 9-10 there is not a clear enough definition on what constitutes a "unreasonable" denial of an application by the utility *or* what constitutes a "substantial expenditure" by the utility. It the utility determines that any new NEM agreements added to the system would equal a "substantial expenditure" than this bill would effectively be dead on arrival. Certain clarifying language should be inserted to determine what these two terms actually mean.

Within HB 1823 at §269-102 on page 5 there is language pertaining to the interconnection of customer energy generators to the utility's electric grid. Special consideration should be given to how the utility and the PUC determine the ability of the electric grid to accept interconnected systems. There should be no reason an applicant is denied a new NEM agreement for oversaturation or grid reliability issues within the confines of this statute. The utility should provide accurate and compelling evidence for denial, with possible review by a third party.

Thank you for the opportunity to testify.

Hawaii Habitat for Humanity® Association

Date: February 22, 2016
To: House Committee on Consumer Protection & Commerce
Re: Hearing, Wednesday, February 24, 2016 – HB1823
Time: 2:05 p.m.
Place: State Capitol, Conference Room 325

Testimony in Support

Chair, McKelvey, Vice Chair Woodson, and members of the Committee on Consumer Protection & Commerce. My name is George Massengale and I am here today on behalf of all seven of Habitat for Humanity affiliates in Hawaii, to testify in support for this measure.

Founded in 1996, Hawaii Habitat for Humanity Association is a resource development and support organization that strengthens, and accelerates the work of local Habitat for Humanity "affiliates" in Hawaii. Our model brings together volunteer labor and donations with lower-income partner families who purchase homes through no-profit, no-interest mortgages. The current build cost for a modest 3 bedroom, 1½ bath home is approximately $130,000.

In 2003, Habitat for Humanity International rolled out its Green Build Initiative, since then Habitat affiliates across the nation have built or refitted thousands of homes of with solar panels. Because our lower income families pay a high proportion of their income toward utility bills, low fuel bills and affordable mortgages will save families hundreds of dollars a year, preserving hard-earned cash for other necessities such as food, clothing, medical expenses, and education.

In Hawaii, Habitat for Humanity has an aligned itself with Mercury Solar to install solar panels on new homes, in addition to retrofitting older Habitat homes within the state. Our Habitat affiliate's support raising capacity limits thus allowing Hawaii's low income families to benefit fully in energy cost saving.

Thank you for the opportunity to testify here today.

Respectfully,

George S. Massengale
Community Outreach Manager

woodson2-Shingai

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, February 21, 2016 7:36 PM
To: CPCtestimony
Cc: carl@votecampagna.com
Subject: Submitted testimony for HB1823 on Feb 24, 2016 14:05PM

HB1823
Submitted on: 2/21/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Carl Campagna	Individual	Support	No

Comments: Mahalo for the opportunity to provide testimony. I support this measure. The number of jobs lost as well as the lost opportunity for businesses and residences to take advantage of solar electricity has been has been damaging to the economy and to the kitchen table cost of living concerns of real people. It is no coincidence that HEI's profits were up in 2015 year over year to 2014. If we are to achieve the 100% RPS we must increase the integration and storage capacity on both sides of the circuits. We must take real action and be serious about achieving the goals for the good people of Hawaii.

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woodson2-Shingai

From: mailinglist@capitol.hawaii.gov
Sent: Monday, February 22, 2016 5:33 AM
To: CPCtestimony
Cc: georgecattermole@earthlink.net
Subject: Submitted testimony for HB1823 on Feb 24, 2016 14:05PM

HB1823
Submitted on: 2/22/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
George Cattermole	Individual	Support	No

Comments: By valuing NEM customers contributions to the web at the true economic value of that energy and by increasing the capacity limits, this bill will encourage the production of cheaper, decentralized renewable energy and contribute to our reaching our 100% renewables goal. Dr. George Cattermole, Waikiki

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From: mailinglist@capitol.hawaii.gov
Sent: Monday, February 22, 2016 8:21 AM
To: CPCtestimony
Cc: dtewabeach@gmail.com
Subject: Submitted testimony for HB1823 on Feb 24, 2016 14:05PM

HB1823
Submitted on: 2/22/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
David Thompson	Individual	Support	No

Comments: I support this bill which would bring Net Energy Metering back to Hawaii.

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February 22, 2016

Roy Skaggs

1804 Ala Moana Blvd #18A

Honolulu, HI 96815

Aloha, Chair Lee, Vice-Chair Lowen and members of the Committee,

My name is Roy Skaggs and I am in strong support of House Bill 1823 HD 1.

I work in renewable energy and it has been a blessing for my family and thousands of Hawaiians. The NEM program is what really made people get on board and help to increase the amount of rooftop PV by astounding numbers. Of course, that and the wonderful tax credits people can get from the Fed and our proud state of Hawaii.

HECO started a strong campaign of "safety" in 2013 but it hasn't been backed by any proof, just words. The saturation limits have been raised from 100% to 120% to now 250%. If you recall, Dr. Steven Chu called HECO's argument BS (he didn't shorten it) about the issue of safety and saturation. He noted Oahu would need to be 20% saturated before it even needed to be looked into.

HECO also started another claim of "cost-shifting" to gain public support by making PV owners the wealthy folks who can afford PV, although there are many programs that allow anyone to get PV. Someone without PV doesn't want to pay for someone with. Seems simple until you look into HECO's bogus claims of $53mm without taking into account many factors that prove the public without PV absolutely did not pay $53mm for the people with. Yet, HECO gets away with bogus claim after bogus claim. And somehow, the PUC buys into it.

These issues led to the PUC making an awful decision to end NEM, but even worse going further than what HECO proposed. HECO proposed to pay $.18 cents per kWh, the PUC went for $.1507 cents. Why? HB1823 HD 1 will get this error fixed. The 25 mW cap imposed by the PUC was another mistake and one that is much more worrisome for those like myself in renewable energy. There are hundreds to possibly thousands of jobs at stake once that cap is hit. Are we actually going to tell people later this year that they can't get solar unless they buy expensive batteries? The grid can handle more PV, it's just that HECO doesn't want to lose any more customers! When battery technology gets better and prices come down over the next couple years, there is going to be a reckoning for the utility. We need to help HECO not cut itself off at the knees and encourage people to get solar and sell it to the utility. Otherwise, they will see a death spiral and then the people without PV will certainly feel the pain as HECO continues to raise their rates for the people leaving the grid entirely.

We can set this right and get NEM back with some adjustments. Everyone understands retail buyback is too high, but to drop it as low as the PUC did combined with the other issues I pointed out will kill off the solar industry in Hawaii until storage is better priced, years from now. Let's remember the rates are artificially low right now because of oil, so we'll be back over $.30 per kWh in no time and into the $.40's like Maui and the Big Island have been at until the low oil prices.

We recently got an F rating for solar! That's pretty embarrassing for a sunshine filled state like Hawaii. By passing HB1823 HD 1, you can make Hawaii the solar leader in our country again.

Thank you for reading my testimony.

Respectfully,

Roy Skaggs

February 8, 2016

Committee on Energy & Environmental Protection

Attention: Chair Chris Lee, Vice-Chair Lowen and Committee Members

Regarding: Bill HB1823 relating to Net Energy Metering

Gentlemen,

I am writing in support of the above referenced bill. I have a PV installation on my home and I have a Net Metering agreement with HECO. I also have an application for another property in Kailua. This application was submitted in early October and has been in limbo because HECO is delaying action on it.

I do not believe that HECO is acting in the best interests of its customers. I also believe that HECOs actions are antithetical to the concept of an Hawaiian energy economy based 100% on renewable sources to Hawaii. HECOs efforts to resist the expansion of NEM is being aided and abetted by our own PUC. The PUC set an arbitrarily low value for any excess energy sent to the grid, thus enriching HECO and short changing consumers.

NEM needs to be expanded; by raising capacity limits and by prohibiting discriminatory charges to NEM customers. Hawaii needs all the low-cost, decentralized, grid connected generation it can get. It appears that bill HB1823 addresses and corrects these issues.

Thank you.

D G Turney

David G Turney

2356 Aha Maka Way, Honolulu, Hawaii. 96821; Phone: 808 732 5322; E-mail: DaMTurney@earthlink.net

woodson2-Shingai

From: mailinglist@capitol.hawaii.gov
Sent: Monday, February 22, 2016 10:36 AM
To: CPCtestimony
Cc: tschmidt@solarsupply.com
Subject: Submitted testimony for HB1823 on Feb 24, 2016 14:05PM

HB1823
Submitted on: 2/22/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Tom Schmidt	Individual	Support	No

Comments: In SUPPORT of HB 1823 HD 1 RELATING TO NET ENERGY METERING Before the HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE Wednesday, February 24, 2016 2:05 p.m. Aloha, Chair McKelvey, Vice-Chair Woodson and members of the Committee. My name is Erik Kvam. I am a Director of Renewable Energy Action Coalition of Hawaii (REACH). REACH is a trade association whose vision is a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii. REACH is in SUPPORT of HB 1823 HD 1. Under NEM, utility customers generate clean renewable energy for their own use and send their excess renewable energy to the grid for use by other utility customers. The PUC noticed that, under the utility's NEM program, the excess energy sent to the grid was being given an arbitrarily high value. The arbitrarily high value meant that NEM customers were gaining wealth at the expense of non-NEM customers. The PUC dealt with the transfer of wealth issue by mistakenly setting an arbitrarily low value for the excess energy sent to grid. The PUC's mistake is closing the market for excess renewable energy sent to the grid. The PUC's mistake is putting as many as a thousand people out of work. What the bill does: • Corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by valuing excess renewable energy sent to the grid at a rate "that reflects the value of such electricity to the utility, ratepayers and the public as measured by avoided capacity costs, avoided operating and maintenance costs, avoided fuel costs and avoided environmental costs" (the Value of Renewable or "VOR" rate) • PUC annually determines the Value of Renewable rate • Increases the NEM system capacity limit from 50 kW to 1 MW • Increases the NEM aggregate capacity limit from ½ % of peak demand to the aggregate amount of such capacity that could be interconnected with the utility's electric system without substantial expenditure, as may be determined by the commission, by the utility for new mitigation facilities to maintain reliability of electric service • Prohibits the utility from assessing interconnection requirements study charges and supplemental review charges against NEM customers Summary: The bill corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by requiring that the HECO utilities value excess energy sent to the grid at a rate, determined by the PUC, that reflects the true economic value of such energy to all customers and to the general public. NEM needs to be expanded -- by raising capacity limits and by prohibiting discriminatory charges to NEM customers -- because Hawaii needs all the low-cost, decentralized, grid- connected renewable generation it can get for the day when imported fuels stop flowing to Hawaii. Thank you for allowing me to testify.

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Sent: Monday, February 22, 2016 11:10 AM
To: CPCtestimony
Cc: mendezj@hawaii.edu
Subject: *Submitted testimony for HB1823 on Feb 24, 2016 14:05PM*

HB1823
Submitted on: 2/22/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

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

Comments:

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woodson2-Shingai

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Sent: Monday, February 22, 2016 11:25 AM
To: CPCtestimony
Cc: kvnplndrs@gmail.com
Subject: Submitted testimony for HB1823 on Feb 24, 2016 14:05PM

HB1823
Submitted on: 2/22/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
kevin landers	Individual	Support	No

Comments: Testimony of Kevin Landers e-mail: kvnplndrs@gmail.com In SUPPORT of HB 1823 HD 1 RELATING TO NET ENERGY METERING Before the HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE Wednesday, February 24, 2016 2:05 p.m. Aloha, Chair McKelvey, Vice-Chair Woodson and members of the Committe e. My name is Kevin Landers. I support the vision of a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii. In SUPPORT of HB 1823 HD 1. Under NEM, utility customers generate clean renewable energy for their own use and send their excess renewable energy to the grid for use by other utility customers. The PUC noticed that, under the utility's NEM program, the excess energy sent to the grid was being given an arbitrarily high value. The arbitrarily high value meant that NEM customers were gaining wealth at the expense of non-NEM customers. The PUC dealt with the transfer of wealth issue by mistakenly setting an arbitrarily low value for the excess energy sent to grid. The PUC's mistake is closing the market for excess renewable energy sent to the grid. The PUC's mistake is putting as many as a thousand people out of work. What the bill does: • Corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by valuing excess renewable energy sent to the grid at a rate "that reflects the value of such electricity to the utility, ratepayers and the public as measured by avoided capacity costs, avoided operating and maintenance costs, avoided fuel costs and avoided environmental costs" (the Value of Renewable or "VOR" rate) • PUC annually determines the Value of Renewable rate • Increases the NEM system capacity limit from 50 kW to 1 MW • Increases the NEM aggregate capacity limit from ½ % of peak demand to the aggregate amount of such capacity that could be interconnected with the utility's electric system without substantial expenditure, as may be determined by the commission, by the utility for new mitigation facilities to maintain reliability of electric service • Prohibits the utility from assessing interconnection requirements study charges and supplemental review charges against NEM customers Summary: The bill corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by requiring that the HECO utiliti es value excess energy sent to the grid at a rate, determined by the PUC, that reflects the true economic value of such energy to all customers and to the general public. NEM needs to be expanded -- by raising capacity limits and by prohibiting discriminatory charges to NEM customers -- because Hawaii needs all the low-cost, decentralized, grid-connected renewable generation it can get for the day when imported fuels stop flowing to Hawaii. Thank you for allowing me to testify. Aloha and best regards, Kevin Landers

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House Bill 1823, House Draft 1 – Relating to Net Energy Metering
Testimony of Hermina Morita

I oppose this bill for the following reasons.

Net energy metering (NEM) was a program to encourage early adoption of renewable energy in its infancy. When the statute was amended in 2001 there was a recognition that NEM would need to be reviewed periodically. Therefore, a NEM system cap (.5% of system peak) was established and later the law was further amended to allow the Public Utilities Commission (PUC) to review and change the program if and when necessary.

Currently, the PUC is in the midst of its distributed energy resources investigation (Docket No. 2014-0192) which included a decision and order issued in October 2015 to end NEM and replace it with two other types of tariffs concluding the first phase of highly technical proceedings. This bill usurps that proceeding at the expense of the electricity ratepayer/customer who does not own or have access to a rooftop photovoltaic (pv) system.

At this high level of rooftop photovoltaic integration, NEM creates an inequity where the NEM customer avoids paying its fair share of fixed costs, shifting this cost to the ratepayer/customer who does not own or have access to a rooftop pv system. The total lost contribution to fixed cost for the HECO Companies has increased from an estimated $19 million based on installed NEM capacity at the of 2012, to $38 million at the end of 2013, to $53 million at the end of 2014, and to an annualized rate of $64 million in 2015.

The NEM program combined with the State's renewable energy income tax credit has created a highly subsidized and uncompetitive solar market on the backs of ratepayers/customers who are primarily low-come, renters or live in multi-family units and the general fund.

Thank you for allowing me to share my views.

Hermina Morita
P.O. Box 791
Hanalei, Hawaii 96714

From: mailinglist@capitol.hawaii.gov
Sent: Monday, February 22, 2016 12:17 PM
To: CPCtestimony
Cc: thomashall@solarspecialtygroup.com
Subject: Submitted testimony for HB1823 on Feb 24, 2016 14:05PM

HB1823
Submitted on: 2/22/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Thomas Hall	Individual	Support	No

Comments: SUPPORT of HB 1823 Under NEM, utility customers generate clean renewable energy for their own use and send their excess renewable energy to the grid for use by other utility customers. The PUC noticed that, under the utility's NEM program, the excess energy sent to the grid was being given an arbitrarily high value. The arbitrarily high value meant that NEM customers were gaining wealth at the expense of non-NEM customers. The PUC dealt with the transfer of wealth issue by mistakenly setting an arbitrarily low value for the excess energy sent to grid. The PUC's mistake is closing the market for excess renewable energy sent to the grid. The PUC's mistake is putting as many as a thousand people out of work. What the bill does: • Corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by valuing excess renewable energy sent to the grid at a rate "that reflects the value of such electricity to the utility, ratepayers and the public as measured by avoided capacity costs, avoided operating and maintenance costs, avoided fuel costs and avoided environmental costs" (the Value of Renewable or "VOR" rate) • PUC annually determines the Value of Renewable rate • Increases the NEM system capacity limit from 50 kW to 1 MW • Increases the NEM aggregate capacity limit from ½ % of peak demand to the aggregate amount of such capacity that could be interconnected with the utility's electric system without substantial expenditure, as may be determined by the commission, by the utility for new mitigation facilities to maintain reliability of electric service • Prohibits the utility from assessing interconnection requirements study charges and supplemental review charges against NEM customers Summary: The bill corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by requiring that the HECO utilities value excess energy sent to the grid at a rate, determined by the PUC, that reflects the true economic value of such energy to all customers and to the general public. NEM needs to be expanded -- by raising capacity limits and by prohibiting discriminatory charges to NEM customers -- because Hawaii needs all the low-cost, decentralized, grid-connected renewable generation it can get for the day when imported fuels stop flowing to Hawaii. Thank you for allowing me to testify.

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Testimony in support of HB 1823 relating to Net Energy Metering (NEM)

I am in support of HB 1823 due to the following reasons:

1. This bill supports existing state mandate of 100% renewable energy goals.
2. This bill provides relief to rate payers in the state who are burdened with highest cost of electricity in the entire nation.
3. This bill supports the fight against climate change and creates a sustainable Hawaiian environment and economy.
4. This bill saves billions of dollars spent to purchase dirty fossil fuels to generate electricity in Hawaii and the money stays in Hawaii.
5. This bill decouples electricity generation cost from cost of oil which is volatile.
6. This bill supports the growth of new solar/renewable industry in the state
7. This bill generates jobs for Hawaiian economy due to solar/renewable energy projects
8. This bill strengthens the power of the consumer to generate his/her own electricity without being dependent on the monopoly of Hawaiian Electric.
9. Hawaiian Electric has not upgraded its grid to support renewable energy growth. Stopping NEM is not the logical solution to the problem of grid saturation. Hawaiian Electric should be required to upgrade its grid network periodically keeping up with technology and safety norms.
10. Hawaiian Electric has not installed sufficient Battery Banks to store excess electricity produced during the day/off peak for use during night/peak times. Recently there was a RFP issued and bids collected by Hawaiian Electric. However, no further action has been taken on awarding a contract to acquire a suitable Battery Bank to support Hawaiian Electric Grid. If this bill is not passed, it will only reward inaction on the part of Hawaiian Electric.
11. The cost of electricity generated and provided to the grid by NEM customers should be scientifically assessed and valued so to show the true savings to Hawaiian Electric.
12. Hawaiian Electric has conducted tests with Advanced Inverters and has found that increasing renewable energy penetration on their circuits up 250% of the Daytime Minimum Load (DML) is easily possible without any safety concerns. This bill will enable all circuits to achieve as a beginning this proven penetration of 250% of DML.
13. Stopping or restricting NEM abruptly on 10/13/2015 creates an inequitable position to all citizens who were planning to install a renewable energy system. This bill allows such citizens to realize their dream of installing a renewable energy system under NEM.
14. Non dependence on imported oil creates an advantageous security position for Hawaii

Mahalo

Charles Chacko

woodson2-Shingai

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 23, 2016 10:07 AM
To: CPCtestimony
Cc: dturner@american-electric.cc
Subject: Submitted testimony for HB1823 on Feb 24, 2016 14:05PM

HB1823
Submitted on: 2/23/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
David Turner	Individual	Support	No

Comments: I understand that HELCO and HECO need to keep their margins high right now because of their potential buy out by NEXTERA industries. However, eventhough the PUC's decision to eleminate NEM use benefits HELCO and HECO to the end of the buy out and pushes pr ofits, the lack of NEM's has basically killed the PV industry on the Big island which in turn has jepordized many jobs, harmed the economy, and stiffled forty years of gains for renewable energy use.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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- -

Testimony of _Kathleen Oldfather

e-mail: KathyOldfather@yahoo.com_

In SUPPORT of HB 1823 HD 1 RELATING TO NET ENERGY METERING

Before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Wednesday, February 24, 2016 2:05 p.m.

Aloha, Chair McKelvey, Vice-Chair Woodson and members of the Committee.

My name is _Kathleen Oldfather. I support the vision of a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii.

I SUPPORT of HB 1823 HD 1.

Under NEM, utility customers generate clean renewable energy for their own use and send their excess renewable energy to the grid for use by other utility customers.

The PUC noticed that, under the utility's NEM program, the excess energy sent to the grid was being given an arbitrarily high value. The arbitrarily high value meant that NEM customers were gaining wealth at the expense of non-NEM customers.

The PUC dealt with the transfer of wealth issue by mistakenly setting an arbitrarily low value for the excess energy sent to grid. The PUC's mistake is closing the market for excess renewable energy sent to the grid. The PUC's mistake is putting as many as a thousand people out of work.

What the bill does:

• Corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by valuing excess renewable energy sent to the grid at a rate "that reflects the value of such electricity to the utility, ratepayers and the public as measured by avoided capacity costs, avoided operating and maintenance costs, avoided fuel costs and avoided environmental costs" (the Value of Renewable or "VOR" rate)

• PUC annually determines the Value of Renewable rate

• Increases the NEM system capacity limit from 50 kW to 1 MW

• Increases the NEM aggregate capacity limit from ½ % of peak demand to the aggregate amount of such capacity that could be interconnected with the utility's electric system without substantial expenditure, as may be determined by the commission, by the utility for new mitigation facilities to maintain reliability of electric service

• Prohibits the utility from assessing interconnection requirements study charges and supplemental review charges against NEM customers

Summary:

The bill corrects the PUC's mistake and eliminates the transfer of wealth from non-NEM customers to NEM customers by requiring that the HECO utilities value excess energy sent to the grid at a rate, determined by the PUC, that reflects the true economic value of such energy to all customers and to the general public.

NEM needs to be expanded -- by raising capacity limits and by prohibiting discriminatory charges to NEM customers -- because Hawaii needs all the low-cost, decentralized, grid-connected renewable generation it can get for the day when imported fuels stop flowing to Hawaii.

Thank you for allowing me to testify

Aloha and best regards,
Kathleen Oldfather

woodson2-Shingai

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 23, 2016 12:22 PM
To: CPCtestimony
Cc: Cruzromero@gmail.com
Subject: Submitted testimony for HB1823 on Feb 24, 2016 14:05PM

HB1823
Submitted on: 2/23/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Romero	Individual	Support	No

Comments: I am in support of this program.

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woodson2-Shingai

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 23, 2016 3:16 PM
To: CPCtestimony
Cc: rvrstn@hotmail.com
Subject: Submitted testimony for HB1823 on Feb 24, 2016 14:05PM

HB1823
Submitted on: 2/23/2016
Testimony for CPC on Feb 24, 2016 14:05PM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
J Riverstone	Positive Energy Arts, Inc	Support	No

Comments: Dear Representative Yamashita Please support this bill. I believe that supporting net metering for PV systems is an important way for us to meet our energy goals as a state and support one of our most promising local industries. It also allows us to take advantage of the federal solar tax credits, which further adds vale to our local economy. Mahalo, Jerry Riverstone Pukalani

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LATE

Aloha,

I would like to commend our Hawaii government for taking a strong stand for renewable energy growth.

I support the HB1823.

My neighbors and friends are in disbelief that the powers to be have taken the current NEM stand.

The outrage is beginning to reach a boiling point. Not only have they lost faith in our politicians, they are losing hope that anyone is willing to stand behind their promises.

While the bills to increase fees and taxes fly through the process, the renewable portfolio is becoming a corporate only program.

Mahalo

Paul Spencer

woodson2-Shingai

From: Leticia Acido-Mercado on behalf of Rep. Angus McKelvey
Sent: Tuesday, February 23, 2016 5:44 PM
To: woodson2-Shingai; woodson1-Anthony
Cc: Daniel Kalili
Subject: FW: support HB1823

Importance: High

Aloha All,

Per Rep McKelvey, please make copies for the testimonies to be submitted.

LATE

Thank you.
T

Leticia "Tish" Acido-Mercado
Office Manager
Representative Angus L. K. McKelvey
District 10: West Maui, Maalaea, N. Kihei
State Capitol Room 320
Phone: (808) 586-6160
Fax:: (808) 586-6161
Email: l..acidomercado@capitol.hawaii.gov

From: Gene Zarro [mailto:gene.zarro@gmail.com]
Sent: Tuesday, February 23, 2016 2:58 PM
To: Rep. Angus McKelvey
Cc: Sen. Roz Baker
Subject: support HB1823

Aloha Angus,
I would like you to know that I am in support of HB 1823.
I am currently contracting for a PV system for the South Maui Learning Ohana building that will house Kihei Charter School.
As you know we have been at this for decades and we are now about a month away from a ground breaking.
Restoring the NEM in Hawaii would go a long way in helping us build the appropriate size PV system that would maximize the energy we could get from solar for our school thus lowering our monthly cost.
Please support this measure.
Aloha
Gene