WRITTEN ONLY

**TESTIMONY OF CARLITO P. CALIBOSO**
**CHAIRMAN, PUBLIC UTILITIES COMMISSION**
**DEPARTMENT OF BUDGET AND FINANCE**
**STATE OF HAWAII**
**TO THE**
**HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE**
**MARCH 24, 2010**

**MEASURE: S.B. No. 2488 SD2 HD1**
**TITLE: Relating to Renewable Energy**

Chair Herkes and Members of the Committee:

**DESCRIPTION:**

This bill would prohibit electric utilities from unreasonably denying, burdening, or delaying net energy metering service requested by an eligible customer-generator. The PUC would be:

- Authorized to specify separate generating capacity requirements or limits for each specified individual generation technology;
- Required to ensure the impacts of net energy metering on rates are reasonable;
- Required to take specific factors into consideration in determining generation capacity requirements or limits.

**POSITION:**

The Commission supports the bill, but would like to offer comments.

**COMMENTS:**

- There appears to be minor typographical errors in Section 3 of the bill, in new sub-paragraph 6 (page 7, lines 8-12 of the bill), which should be revised as follows:

"The comparative benefit and cost to ratepayers of net-energy metering, feed-in tariffs or other mechanisms or programs ~~exist~~ that are available and provide for effective implementation of distributed generation resources;"

- In determining generating capacity requirements or limits for individual generation technologies, the bill should more broadly require the consideration of established state energy policies more generically than specifying only that the terms of the Hawaii Clean Energy Initiative Agreement be considered. Accordingly, Section 3 of the bill, sub-paragraph 7 (page 7, lines 13-14 of the bill), should be replaced in its entirety with the following:

"Established and current state energy policy in order to advance the clean energy goals of the state."

Thank you for the opportunity to testify.

# Testimony before the House Committee on Consumer Protection & Commerce

## S.B. 2488 S.D. 2 H.D. 1 -- Relating to Renewable Energy

**Wednesday, March 24, 2010**
**2:00 pm, Conference Room 325**

**By Arthur Seki**
**Director, Renewable Technology**
**Hawaiian Electric Company, Inc.**

Chair Herkes, Vice-Chair Wakai and Members of the Committee:

My name is Arthur Seki. I am the Director of Renewable Technology for Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric Company (HECO) and its subsidiary utilities, Maui Electric Company (MECO) and Hawaii Electric Light Company (HELCO).

We recognize the Legislature's strong interest in seeing more renewable energy development in the State and are committed not only to supporting renewable energy development but also to conservation and energy efficiency practices to reduce the State's dependence on imported oil. We have testified in previous legislative sessions in support of several Net Energy Metering (NEM) measures, including the Act which enacted the NEM law.

We support the intent of S.B. 2488 S.D. 2 H.D. 1. The Public Utilities Commission (PUC) can currently make modifications to the NEM tariff by rule or order and has already shown its ability to make such modifications to the NEM tariff when it approved various changes to NEM in 2008 (Docket No. 2006-0084).

We strongly support the continued role of the PUC and the regulatory review process to examine these program design details. This is especially important given the complexity of the technical, cost, and regulatory policy issues associated with net metering and other renewable energy development mechanisms administered by the PUC.

Thank you for the opportunity to testify.

**Hawaii Solar Energy Association**
*Serving Hawaii Since 1977*

**March 24, 2010**
**2:00PM**

**House**
**COMITTEEE ON CONSUMER PROTECTION AND COMMERCE**

**Mark Duda**
**President**

**SB 2488 SD2 HD1**

**TESTIMONY IN SUPPORT WITH STRONG PREFERENCE TO REVERT TO SD2**

Aloha Chair Herkes, Vice Chair Wakai, and Members of the Committee:

HSEA supports this measure, which in its current form offers protections to existing net energy metering (NEM) customers by preventing them from unilaterally having their NEM contracts cancelled by the utility. However, HSEA strongly prefers SD2 of the measure, which includes a number of important provisions that will allow Hawaii to progress more rapidly toward its renewable energy goals, create renewable energy jobs, and raise additional tax revenues.

The earlier draft of the bill addressed two key challenges that would-be NEM generators face. Each challenge stems from an unnecessary, restrictive cap in the current program.

(1) The current rules limit the net energy metering program to 100 kW per system. This is well below the size of system that many business owners need to eliminate their electric bills, which is typically their goal. As an example, I was speaking to a customer yesterday with a large roof and the need for a 380 kW PV system to fully offset his entire electrical usage. Since he had only a single meter, however, his only option was to address roughly one quarter of his load with a 100 kW PV system and continue paying the utility for the remainder. Absurdly, if he happened to have the same electrical load distributed across four meters, he would have been able to address his entire load under the current net metering program. This kind of discriminatory impact cannot possibly have been the intent of the policy and serves to illustrate how flawed the existing cap is.

In evaluating the wisdom of increasing the NEM system size cap note that the HECO Companies have moved away from their historical objection to interconnecting systems larger than 100 kW that export power to the grid, in general. The HECO Companies have, in fact, proposed interconnecting technologically identical systems at levels of 500 kW and above in the feed-in tariff docket (2008-0273) and the PV Host docket (2009-0098).

(2) The current rules restrict the NEM program to 1 percent of system peak for HECO and 3 percent for MECO and HELCO. (KIUC is engaged in an ambitious pilot program that will take NEM to around 7 percent, pending PUC approval). Although the MECO and HELCO systems are supposed to move automatically to 4 percent according to a Commission order (from December 26, 2008) in the net metering docket (2006-0084) in which HSEA is an intervener, they have since expressed the desire to remain at 3 percent on the HELCO system.

These artificially low limits on the NEM program are unnecessary because there is already a more comprehensive limit on these systems under the HECO Companies' Rule 14, which governs the interconnection of distributed systems. The earlier version of the bill proposes simply using this existing cap to regulate the net metering program.

In evaluating the wisdom of eliminating the grid wide caps, note that the HECO Companies have already explicitly agreed to do this in the Energy Agreement with the State of Hawaii in October of 2008. This bill would simply require them to keep an obligation they have been avoiding since that time.

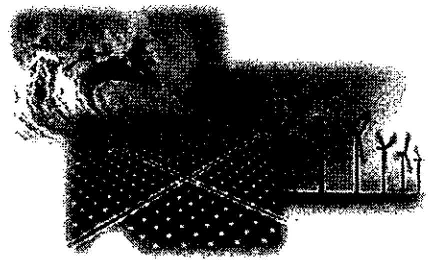
In summary, this is an important measure that marshals private capital to the cause of increasing Hawaii's energy security and reducing carbon emissions, while at the same time reducing operating costs for homes and businesses in the state.

Thank you for the opportunity to testify on this measure.

Mark Duda
President, Hawaii Solar Energy Association

**About Hawaii Solar Energy Association**
*Hawaii Solar Energy Association (HSEA) is comprised of installers, distributors, manufacturers and financers of solar energy systems, both hot water and PV, most of which are Hawaii based, owned and operated. Our primary goals are: (1) to further solar energy and related arts, sciences and technologies with concern for the ecologic, social and economic fabric of the area; (2) to encourage the widespread utilization of solar equipment as a means of lowering the cost of energy to the American public, to help stabilize our economy, to develop independence from fossil fuel and thereby reduce carbon emissions that contribute to climate change; (3) to establish, foster and advance the usefulness of the members, and their various products and services related to the economic applications of the conversion of solar energy for various useful purposes; and (4) to cooperate in, and contribute toward, the enhancement of widespread understanding of the various applications of solar energy conversion in order to increase their usefulness to society.*

blue planet FOUNDATION



**HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE**
March 24, 2010, 2:00 P.M.
Room 325

**(Testimony is 2 pages long)**

**TESTIMONY IN SUPPORT OF SB 2488 SD2 HD1, SUGGESTED AMENDMENTS**

Chair Herkes and members of the Committee:

The Blue Planet Foundation supports Senate Bill 2488 SD2 HD1, a measure that, in its current form, offers protections to existing net energy metering customers by preventing them from unilaterally having their contracts cancelled by the utility. Blue Planet prefers that this measure be amended back to its Senate Draft 2 form which includes a number of important provisions that will allow Hawaii to progress more rapidly toward its renewable energy goals, create renewable energy jobs, and raise additional tax revenues.

Net energy metering has been one of Hawaii's most effective policies at increasing distributed clean energy resources. After wisely being passed in 2001, net energy metering slowly began with a handful of renewable energy generators. As more homeowners learn about the program and its impacts on the payback period for renewable energy devices, the subscription rate has dramatically increased. In fact, we may be nearing a "tipping point" where many residential customers invest in renewable energy devices because of their relative cost and environmental advantages.

The preferred version of this measure, SB 2488 SD2, would expand the allowable system size for net metered systems, increase the total clean energy penetration limit, allow solar energy credits to be valued beyond the current one-year cycle, and direct the public utilities commission to adopt best practice interconnection standards for solar and other clean energy systems. SB

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2488 would encourage further investment in customer-sited clean energy systems statewide, further reducing Hawaii's dependence on fossil fuel and moving toward energy independence.

This measure should pick up where prior legislation left off—expanding the allowable system size, reducing grid connection limitations, and allowing net metered customers to be compensated for excess energy credits at the end of a billing cycle, among other improvements.

The feed-in tariff docket pending before the public utilities commission (Blue Planet is an intervenor in the docket) has examined many of the issues the prevented larger system sizes and increased grid penetration caps previously. Many of the previous hurdles were simply political or protectionist. This measure will force a more proactive approach to implementing a 21st century power grid that Hawai'i requires to meet its aggressive clean energy goals.

This measure should help enable residents and businesses statewide to turn their rooftops into power plants. The potential benefit of this measure to potential photovoltaic (PV) investors is significant. Customers will no longer be left with the choice of investing in only a portion of their roof for a 100 kW PV system and offsetting a small portion of their bill. Instead they can help Hawaii achieve its clean energy future by investing in a system that is sized to their power consumption and provides additional power to the grid.

**We respectfully ask that this Committee amend SB 2488 back to its Senate Draft 2 form to keep Hawaii's clean energy legislation up-to-date with recent regulatory progress and the state of the solar industry.**

Thank you for the opportunity to testify.

Room # 325 2:00 PM March 24, 2010

## House Committee on Consumer Protection and Commerce

**SB2488, SD2, HD1 RELATING TO ENERGY EFFICIENCY**

**Chair Herkes, Vice-Chair Wakai and Committee Members:**

Introduction: My name is Riley Saito Senior Manager, Hawaii Projects for the SunPower Systems Corporation. Thank you in advance for accepting these comments on **SB2488, SD2, HD1.**

SunPower Systems Corporation ("SunPower") has been a member of the Hawaii Energy Policy Forum since it convened in 2003. SunPower is in the business of designing, manufacturing, and delivering the highest efficiency solar electric technology worldwide. One of our latest projects was the 1.2 megawatt La Ola solar farm on Lanai with Castle & Cooke Hawaii.

SunPower supports this measure, which in its current form offers protections to existing net energy metering (NEM) customers by preventing them from unilaterally having their NEM contracts cancelled by the utility. However, **SunPower strongly prefers SD2 of the measure**, which includes a number of important provisions that will allow Hawaii to progress more rapidly toward its renewable energy goals, create renewable energy jobs, and raise additional tax revenues.

The earlier draft of the bill addressed two key challenges that would-be NEM generators face. Each challenge stems from an unnecessary restrictive cap in the current program.

1. The current rules limit the net energy metering program to 100 kW per system. This is well below the size of system that many business owners need to eliminate their electric bills, which is typically their goal. As an example, I was speaking to a customer yesterday with a large roof and the need for a 380 kW PV system to fully offset his entire electrical usage. Since he had only a single meter, however, his only option was to address roughly one quarter of his load with a 100 kW PV system and continue paying the utility for the remainder. Absurdly, if he happened to have the facility's load distributed across four meters, he would have been able to address his entire load under the net metering program. This kind of discriminatory impact cannot possibly have been the intent of the policy and serves to illustrate how flawed it is.

In evaluating the wisdom of increasing the NEM system size cap note that the HECO Companies have moved off their historical objection to interconnecting systems larger than 100 kW that export power to the grid because they may cause technical problems. HECO has in fact proposed interconnecting technologically identical systems at levels of 500 kW and above in the feed-in tariff docket (2008-0273) and the PV Host docket (2009-0098).

2. The current rules restrict the NEM program to 1 percent of system peak for HECO and 3 percent for MECO and HELCO. (KIUC is engaged in an ambitious pilot program that will take NEM beyond 6 percent, pending PUC approval). Although the MECO and HELCO systems are supposed to move automatically to 4 percent according to a Commission order (from December

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26, 2008) in the net metering docket (2006-0084) in which HSEA is an intervener, they have since expressed the desire to remain at 3 percent on the HELCO system.

These artificially low limits on the NEM program are unnecessary because there is already a more comprehensive limit on these systems under the HECO Companies' Rule 14, which governs the interconnection of distributed systems. The earlier version of the bill proposes simply using this existing cap to regulate the net metering program.

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In summary, this is an important measure that marshals private capital to the cause of increasing Hawaii's energy security and reducing carbon emissions, while at the same time reducing operating costs for homes and businesses in the state.

Thank you for the opportunity to testify on this measure.