

Bill No. 2238

Support  Y  N

Date 1/25

Time 9:39 AM

Cat AF AS AX  B C

Type  1  2 WI

## Testimony before the House Committee on

### Energy & Environmental Protection

#### H.B. 2238 – Relating to Renewable Portfolio Standard

Tuesday, January 26, 2010  
8:00 am, Conference Room 325

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

Chair Morita, Vice Chair Coffman and members of the Committee:

My name is Arthur Seki—I am the Director of Renewable Technology at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric Company (HECO) and its subsidiaries, Maui Electric Company (MECO) and Hawaii Electric Light Company (HELCO) hereinafter collectively referred to as HECO Utilities.

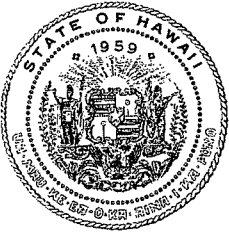
We strongly support H.B. No. 2238, which provides clarification for customer-sited, grid-connected renewable energy generation. With this clarification to the “renewable electrical energy” definition, customer-sited renewable generation will continue to be included in the renewable portfolio standard (“RPS”) calculations after 2015 as is the current practice in calculating RPS levels.

The HECO Utilities are committed to increasing the amount of renewable energy from sustainable resources in order to reduce Hawaii’s dependence on imported oil. There have been a number of renewable energy projects and initiatives related to renewable energy that we have undertaken:

- Integrated wind generated electricity from 3 new wind farms--Hawi (10 MW) and Pakini Nui (20 MW) at South Point on the Big Island and Kaheawa (30 MW) on Maui;
- Negotiating new contracts related to wind on Maui and Oahu, solar and geothermal on the Big Island and ocean energy for Oahu and Maui;

- Negotiating new contracts from the short-listed renewable energy projects resulting from the HECO 100 MW RFP for Oahu;
- Installed a 100 MW power plant at Campbell Industrial Park to be 100% biofueled;
- Conducting wind integration study on Maui;
- Conducting wind and solar integration study for Interisland Wind from the neighbor island to Oahu;
- Planning for a 30-day test at Kahe 3 biofuel co-firing demonstration in a steam boiler generating unit in late 2010;
- Provided 3 years of seed funding to the Hawaii Agriculture Research Center ("HARC") and the agriculture departments at the University of Hawaii's Manoa and Hilo campuses to conduct biofuel crop research with a 4<sup>th</sup> year of funding to follow this year; and
- Evaluating micro-algae for biofuels and ocean energy projects.

In conclusion, the HECO Utilities supports H.B. No. 2238. Thank you for the opportunity to testify.



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

LINDA LINGLE  
GOVERNOR  
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Statement of  
**THEODORE E. LIU**  
**Director**  
Department of Business, Economic Development, and Tourism  
before the  
**HOUSE COMMITTEE ON  
ENERGY AND ENVIRONMENTAL PROTECTION**

Tuesday, January 26, 2010  
8:00 a.m.  
State Capitol, Conference Room 325

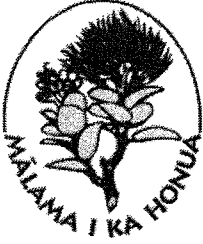
in consideration of  
**HB 2238**  
**RELATING TO RENEWABLE PORTFOLIO STANDARDS.**

Bill No. HB 2238  
Support  Y  N  
Date 1/25/10  
Time 1646  
Cat AF  AS  AX  B  C  
Type 1  WI

Good morning, Chair Morita, Vice Chair Coffman, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports House Bill 2238 which amends the definition of "renewable electrical energy" in Hawaii's Renewable Portfolio Standards (RPS) law mandated in Section 269-91, HRS, to include customer-sited, grid-connected renewable energy generation, beginning January 1, 2015. DBEDT supports this amendment to Section 269-91(1), HRS, which clarifies Hawaii's RPS law. The bill will encourage the utilities to facilitate the integration of customer-sited renewable systems in the utility grid as these systems will help achieve their statutorily mandated RPS goals. The achievement of the RPS goals will help achieve Hawaii's energy transformation from the most fossil fuel-dependent state economy in the nation to one that is 70% clean and renewable energy-based by 2030.

DBEDT supports the passage of this bill. Thank you for the opportunity to testify.



# Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803  
808.538.6616 hawaii.chapter@sierraclub.org

Bill No. HB 2238

Support  Y  N

Date 1/29/10

Time 1531

Cat AF AS AX  C

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

January 26, 2010, 8:00 A.M.

Type 1  WI

(Testimony is 1 page long)

## TESTIMONY IN SUPPORT OF HB 2238

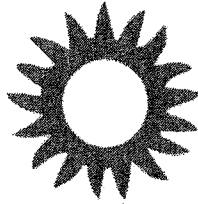
Aloha Chair Morita and Committee Members -

The Hawai'i Chapter of the Sierra Club supports HB 2238, which clarifies that distributed energy is a renewable energy source.

Plainly the proposed language comports with everyone's general intent in establishing our renewable portfolio standards. We see this bill mostly as a clarification and language "cleanup" bill.

Thank you for the opportunity to testify.

TESTIMONY SUBMITTED BY



ISLAND PACIFIC  
ENERGY

Joseph Saturnia  
President

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Bill No. HB 2238  
Support Y  N  
Date 1/25/10  
Time 1535  
Cat AF AS AX  B C  
Type 1  2 WI

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Hermina M. Morita, Chair  
Rep. Denny Coffman, Vice Chair

HB 2238

RELATING TO RENEWABLE PORTFOLIO STANDARDS

January 26, 2010 8:00AM  
State Capitol  
House Conference Room 325  
415 South Beretania Street  
Honolulu, HI 96813

# **Opposition to HB 2238 – RELATING TO RENEWABLE PORTFOLIO STANDARDS**

## **Executive Summary**

My name is Joseph Saturnia and I am President of Island Pacific Energy, the leading developer, owner operator of photovoltaic renewable energy facilities in the State of Hawai'i. I am testifying on behalf of Island Pacific Energy in opposition to HB 2238 - RELATING TO RENEWABLE PORTFOLIO STANDARDS. We oppose this bill as it will have the unintended consequence of creating a missed opportunity to bring badly needed dollars from outside the State to help stimulate our local economy.

## **Renewable Energy Credits (RECs)**

Renewable energy systems such as photovoltaic solar power and wind farms provide clean energy for the people of Hawai'i. These systems not only produce electricity but they also produce the green attributes of that electricity. The green attributes are environmental benefits of the power generated by renewable means as opposed to carbon based power generation.

The green attributes of renewable energy systems have value and can be sold and traded as a Renewable Energy Credit or REC. Companies who do not have access to renewable energy but desire the environmental benefits, purchase these RECs to help meet their renewable energy requirements.

Unfortunately, when the State of Hawai'i defines "Renewable Electrical Energy" as customer sited, grid connected renewable energy generation as it relates to the State's Renewable Portfolio Standard, the green attributes of these systems are no longer convertible into RECs. As such, the State's economy is deprived of the stimulus that the money from the sales of these RECs would provide. The attributes go unused and the State misses out on money that would otherwise flow in from outside of the Islands.

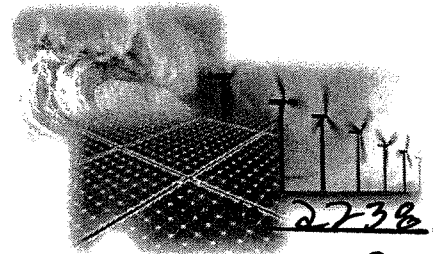
## **Conclusion**

By defining "Renewable Electrical Energy" as customer sited, grid connected renewable energy generation as it relates to the State's Renewable Portfolio Standard, the State of Hawai'i will miss out on the opportunity to bring badly needed dollars from outside the State to help build our local renewable energy industry and stimulate our local economy.

Joseph Saturnia  
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## **About Island Pacific Energy**

Island Pacific Energy is the leading developer, operator of photovoltaic solar energy facilities in the State of Hawai'i and is the recipient of the Governor's Award for Innovation. Island Pacific Energy makes renewable energy systems affordable to Hawaiian consumers, businesses, government, and not-for-profit organizations. For more information, please visit [www.islandpacificenergy.com](http://www.islandpacificenergy.com).



Support Y

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Date 1/26

January 26, 2010, 8:00 A.M.

Room 325

Time 16

25 COPIES REQUESTED

(Testimony is 1 page long)

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TESTIMONY IN OPPOSITION TO HB 2238

Type 1  WI

Chair Morita and members of the committee:

The Blue Planet Foundation opposes HB 2238, a measure which amends the state's renewable portfolio standards so that they include customer-sited, grid-tied clean energy generation.

While Blue Planet strongly supports the concept of customer-sited, grid-tied, clean energy distributed generation, we believe that this measure will weaken the requirements on our electric utilities to provide clean energy and damage the nascent renewable energy credit market in Hawai'i. Hawai'i's renewable portfolio standards (RPS)—as amended last session—explicitly exclude customer-sited renewable energy, and for good reason.

Hawai'i's RPS currently requires Hawai'i's electric utilities to provide clean energy for 15% of its net electricity sales by 2015; 25% by 2020; and 40% by 2030. By allowing the inclusion of customer-sited photovoltaic and wind devices, this measure would reduce the actual percentage of clean energy that the utilities would need to provide. The RPS percentages should be maintained for the utility-provided power, while customer-sited renewable energy (which typically just reduces the customer's energy load) will move Hawai'i even closer to energy independence.

Second, renewable energy credits (RECs)—credits for the provision of clean power—are available to those who install the clean energy systems. While the market in RECs is fairly new and just being developed, there is potential that the value of RECs available to homeowners or businesses that install clean energy equipment could help to make the installation more cost effective. This measure, however, would possible confuse who actually owns the RECs—the homeowner or the utility—and may damage the nascent REC market in Hawai'i.

For these reasons, we ask that this committee hold this measure.

Thank you for the opportunity to testify.

Jeff Mikulina, executive director • jeff@blueplanetfoundation.org

55 Merchant Street 17th Floor • Honolulu, Hawai'i 96813 • 808-954-6142 • blueplanetfoundation.org





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

Bill No. 2238

Support Y (N)

Date 1/26

Time 3:17

January 26, 2010  
8:00 AM

House  
Committee on Energy and Environmental  
Protection  
HB2238

Mark Duda  
President AF AS AX (C)

Type 1 (2) WI

**HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION**

**TESTIMONY IN OPPOSITION**

Aloha Chair Morita, Vice Chair Coffman and Committee Members:

Nationally, the renewable energy industry relies on subsidies of varying sorts as it continues to mature. These subsidies take many forms as you yourselves know, including tax credits, accelerated depreciation, and other measures at both the state and federal levels.

One incentive that has evolved outside of government action, however, relies on the ability of renewable energy producers to separate the environmental attributes of green power from the actual electrons they produce. The name given to these green attributes is renewable energy credits (RECs) or green tags. These commodities are bought and sold by the megawatt hour, in wholly voluntary markets. New Jersey has the most advanced of these and sees prices that range from \$200 to \$600 per REC (i.e., the green attributes of 1000 kWh produced with renewable energy). This can exceed the value of the power produced

The voluntary market relies on independent third party certification of the RECs. Among other things, this certification addresses possible double counting against multiple RPSs or other clean energy goals. This requirement currently makes Hawaii RECs useless precisely because, although Hawaii utilities do not own the RECs generated by the distributed generation systems attached to their grids, they are still able to count the energy produced by these system toward their RPS goals.

This practice by Hawaii utilities of counting RECs that they do not own toward their RPS goals has rendered Hawaii RECs un-certifiable. Without certification they have literally no value. HSEA is concerned that the measure under consideration would actually make this situation worse by ratifying this stats quo.

Note that the primary beneficiaries of a market for Hawaii RECs would not be renewable energy project developers because the market would very rapidly integrate them into project financing and the additional project revenue stream would, in effect, lower development costs to the end user of the power. This situation would particularly affect third party financed projects, such as those that the State of Hawaii has out

under RFP or has recently closed RFPs on. To put this another way, with a robust market for the green attributes of Hawaii's ever-growing supply of renewable power, the cost to the State of procuring this power under PPAs would be lower than it is today.

HSEA is further concerned that this measure would run afoul of various proposals to nationalize the market for the environmental attributes of clean energy. Depending on the nature of such markets, Hawaii could be left out of this federal market for clean energy as a result of the blurring of ownership and use rights over the green attributes of its power, as codified in this measure.

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 financiers 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.*

**HAWAII RENEWABLE ENERGY ALLIANCE**

46-040 Konane Place #3816, Kaneohe, HI 96744 – Telephone/FAX: 247-7753 – Email: wsb@lava.net

**TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII  
RENEWABLE ENERGY ALLIANCE BEFORE THE HOUSE COMMITTEE ON  
ENERGY AND ENVIRONMENTAL PROTECTION**

**HB 2238, RELATING TO RENEWABLE ENERGY**

January 26, 2010

**Officers**

President  
Warren S. Bollmeier II

Vice-President  
John Crouch

**Directors**

Warren S. Bollmeier II  
WSB-Hawaii

Cully Judd  
Inter Island Solar Supply

John Crouch  
Sunpower

Herbert M. (Monty) Richards  
Kahua Ranch Ltd.

Chair Morita, Vice-Chair Coffman and members of the Committee I am Warren Bollmeier, testifying on behalf of the Hawaii Renewable Energy Alliance (HREA). HREA is an industry-based, nonprofit corporation in Hawaii established in 1995. Our mission is to support, through education and advocacy, the use of renewables for a sustainable, energy-efficient, environmentally-friendly, economically-sound future for Hawaii. One of our goals is to support appropriate policy changes in state and local government, the Public Utilities Commission and the electric utilities to encourage increased use of renewables in Hawaii.

The purpose of HB 2238 is to amend the definition of "renewable electrical energy" to include, beginning January 1, 2015, customer-sited, grid-connected renewable energy generation. The "apparent" purpose of the proposed amendment is to ensure that said renewable distributed generation ("DG") be included as part of RPS. If so, we believe the current law does not need to be amended to meet that objective. However, that said, we believe it is appropriate to amend the definition of "renewable electrical energy" to be consistent with what we believe to be the "essence and spirit of RPS" as follows:

1. What is the Essence and Spirit of RPS? RPS is basically a requirement that a certain fraction of the electricity sold by the utility to its customers comes from renewable energy. To meet its RPS, the utility can generate renewable electricity itself, but typically the utility enters into Power Purchase Agreements ("PPAs") with renewable energy producers for supply of renewable power. Our law also recognizes and includes "electrical energy savings" brought about by renewable displacement (or off-set) and renewable DG technologies, and certain energy efficiency measures.
2. Is all Renewable DG created equal? Short answer is "no." Renewable DG can be a supply-side resource, as when a producer sells power to the utility, or a demand-side resource, as when installed on the customer-side of the meter to bring about "electrical energy savings," such as a PV or wind system under a net metering agreement.
3. Why is this important? We believe only supply-side, renewable DG should be part of RPS, whereas the demand-side renewable DG should be part of an Energy Efficiency Portfolio Standard ("EEPS") or a Demand-Side Portfolio ("DPS"), which we believe is more appropriate. It is important to ensure that the appropriate entity is incentivized and held accountable, e.g., the utility in the case of the RPS, and in our opinion, the Public Benefits Fund Administrator in the case of the DPS.
4. Recommendation. We recommend that the Public Utility Commission be directed to investigate the issues we have raised and other issues related to the design and implementation of RPS and DPS.

Bill No. 2238

Support Y N X

Date 1/25

Time 2146

Cat AF AS AX (B)C

Type 1 (2) WI

Thank you for this opportunity to testify.

WRITTEN TESTIMONY OF CARLITO P. CALIBOSO  
 CHAIRMAN, PUBLIC UTILITIES COMMISSION  
 DEPARTMENT OF BUDGET AND FINANCE  
 STATE OF HAWAII  
 TO THE  
 HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION  
 JANUARY 26, 2010

Bill No. 2238  
 Support  Y  N  
 Date 1/25/10  
 Time 5:12 pm  
 Cat AF  AS  AX  BC  
 Type 1  2  WI

MEASURE: H.B. No. 2238  
 TITLE: Relating to Renewable Portfolio Standards

Chair Merita and Members of the Committee:

DESCRIPTION:

January 1, 2015, customer-sited, grid-connected renewable energy generation.

POSITION:

The Public Utilities Commission ("Commission") supports this bill.

COMMENTS:

Under the current law, it is unclear how customer-sited, grid-connected renewable energy generation will be treated starting in 2015, when electrical energy savings will no longer count toward a utility's renewable portfolio standards ("RPS"). The amendment in this bill removes any confusion by expressly stating that all customer-sited, grid-connected renewable energy generation will count towards the electric utilities' RPS.

Thank you for the opportunity to testify.



LINDA LINGLE  
GOVERNOR

JAMES R. AIONA, JR.  
LT. GOVERNOR

STATE OF HAWAII  
OFFICE OF THE DIRECTOR  
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS  
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HONOLULU, HAWAII 96809  
Phone Number: 586-2850  
Fax Number: 586-2856  
www.hawaii.gov/dcca

Bill No. 2238

Support  Y  N

Date 1-25-10

Time 7:47 am

Cat AF (AS) AX B C

Type (1) 2 WI

LAWRENCE M. REIFURTH  
DIRECTOR  
RONALD BOYER  
DEPUTY DIRECTOR

TO THE HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

THE TWENTY-FIFTH LEGISLATURE  
REGULAR SESSION OF 2010

TUESDAY, JANUARY 26, 2010  
8:00 A.M.

TESTIMONY OF DEAN NISHINA, EXECUTIVE DIRECTOR,  
DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND  
CONSUMER AFFAIRS, TO THE HONORABLE HERMINA M. MORITA, CHAIR, AND  
MEMBERS OF THE COMMITTEE

**HOUSE BILL NO. 2238, – RELATING TO RENEWABLE PORTFOLIO STANDARDS.**

**DESCRIPTION:**

This measure modifies Hawaii Revised Statutes Section 269-91 by amending the definition of "renewable electrical energy" to include customer-sited, grid-connected renewable energy generation beginning January 1, 2015.

**POSITION:**

The Division of Consumer Advocacy ("Consumer Advocate") supports the measure.

**COMMENTS:**

Currently, the definition of renewable electrical energy includes electrical energy savings. However, as set forth in HRS § 269-92(b)(2), electrical energy savings will not be included within the calculation of renewable electrical energy beginning January 1, 2015.

The current definition of electrical energy savings as set forth in HRS § 269-91(2) includes customer-sited, grid-connected renewable energy systems. While HRS § 269-91(2) already includes language that indicates that renewable energy generated by customer-sited, grid-connected renewable energy systems will not be included in the calculation of electrical energy savings, it is not clear how the energy generated from customer-sited, grid-connected renewable energy systems should be classified beginning January 1, 2015.