



## DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of

#### THEODORE E. LIU

Director

Department of Business, Economic Development, and Tourism before the

### HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Wednesday, February 10, 2010 2:00 p.m. State Capitol, Conference Room 325

in consideration of HB 2238

#### RELATING TO RENEWABLE PORTFOLIO STANDARDS.

Good afternoon, Chair Herkes, Vice Chair Wakai, 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.

# TESTIMONY OF CARLITO P. CALIBOSO CHAIRMAN, PUBLIC UTILITIES COMMISSION DEPARTMENT OF BUDGET AND FINANCE STATE OF HAWAII TO THE

## HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE FEBRUARY 10, 2010

MEASURE: H.B. No. 2238

TITLE: Relating to Renewable Portfolio Standards

Chair Herkes and Members of the Committee:

#### **DESCRIPTION:**

This bill amends the definition of "renewable electrical energy" to include, beginning 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.

## **Testimony before the House Committee on**

#### **Consumer Protection & Commerce**

H.B. 2238 - Relating to Renewable Portfolio Standard

Wednesday, February 10, 2010 2:00 pm, Conference Room 325

By Arthur Seki Director of 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 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 customersited, 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.

#### Aministration Commission

From:

John Mumford

Sent:

Monday, February 08, 2010 1:43 PM

To: Cc: CPCtestimony John Mumford

Subject:

Testimoney on HB 2238 (HSCR18-10)

Testifier: John B. Mumford, 149/150/151 Kapiha'a Place, Manele Bay, Lana'l, Hawaii. cell 650-793-1932.

Committee On Consumer Protection & Commerce, Rep. Robert N. Herkes, Chair, Rep. Glenn Wakai, Vice Chair.

Wednesday, February 10, 2010, 2:00pm.

HB 2238 (HSCR18-10) Renewable Portfolio Energy Standards

Testimony of John B. Mumford February 8, 2010:

I SUPPORT the amended definition of renewable electrical energy to include "customer-sited, grid-connected renewable energy generation".

In 2009 I contracted with Rising Sun Solar Electric, Haiku, HI for a 42 KW Photovoltaic Solar System for our property located at 149/150/151 Kapiha'a Place, Manele Bay, Lana'i. The system cost was \$375,000 plus approximately \$75,000 of site preparation and foundation. The system was to be a Net Meter system connected to MECO's Lanai grid (per other systems on the island) and supply all of the electrical power need for our property, with a potential payback of 15-20 years.

After preparing the foundation site and bringing all of the purchased equipment to Lana'I, Rising Sun was told by MECO management and employees that our system could not be connected to the MECO grid circuits. Only after these discussions did MECO stop their promotion of renewable energy to residents and send a letter to homeowners, including us, that this situation existed. The contractor has tried to use equipment elsewhere, but I have sustained losses in excess of \$100,000 as a consumer trying to utilize "renewable energy" in my home. During this time, I learned from various contractors that the existing PV facility on Lana'I, owned by Murdock/Castle & Cooke, was not able to fully access the MECO grid. Apparently this facility cost \$19 million and immediately received \$24 million of taxpayer money in terms of tax credits. During these discussions, I was told that only between 30% to 50% of the potential renewable energy from this system could be used by MECO. Changing the definition of renewable energy to include systems to be constructed and paid for by individual property owner/consumers might at least help prevent utilities and government agencies from misrepresenting the current capabilities and the risks involved to consumers.

As someone who has personally invested in renewable energy and been burned because the infrastructure was not designed to handle it, I would encourage your Committee on Consumer Protection and Commerce to please get involved in the Lana'i and Molokai Wind Farms and Ocean Cable proposal. If this project ends up like the one on the Big Island and many on the mainland, it could destroy the quality of life for the residents and commerce on these two pristine and historic islands

I SUPPORT HB 2238 amended definition.

Thank you for this opportunity to testify to your Committee.

John B. Mumford 149 Kapiha'a Place Lanai, HI 96763 650-793-1932



#### Hawaii Solar Energy Association

Serving Hawaii Since 1977

February 10, 2010 2:00 P.M.

## HOUSE COMITTEEE ON CONSUMER PROTECTION & COMMERCE HB 2238

Mark Duda President

#### **TESTIMONY IN STRONG SUPPORT**

Aloha Chair Herkes and Vice Chair Wakai and Members of the Committee.

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 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.

#### **TESTIMONY SUBMITTED BY**



Joseph Saturnia
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#### **HB 2238**

#### RELATING TO RENEWABLE PORTFOLIO STANDARDS

February 10, 2010 2:00PM 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

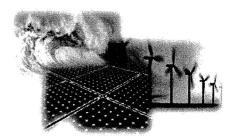
By defining "Renewable Electrical Energy" as customer sited, grid connected renewable energy generation as it relates to the State's Renewable Portfolio Standard, the State of Hawai'i will miss out on the opportunity to bring badly needed dollars from outside the State to help build our local renewable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

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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 <a href="https://www.islandpacificenergy.com">www.islandpacificenergy.com</a>.





#### HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 10, 2010, 2:00 P.M. Room 325

(Testimony is 1 page long)

#### **TESTIMONY IN OPPOSITION TO HB 2238**

Chair Herkes 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. Hawaii's renewable portfolio standards (RPS)—as amended last session—explicitly exclude customer-sited renewable energy, and for good reason.

Hawaii's RPS currently requires Hawaii'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.