



**DEPARTMENT OF BUSINESS,
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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

Monday, March 23, 2009
2:15 p.m.
State Capitol, Conference Room 325

in consideration of

**SB 1258 SD2, HD1
RELATING TO RENEWABLE ENERGY.**

Good Afternoon, Chair Herkes, Vice Chair Wakai, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) generally supports Senate Bill 1258 SD2, HD1 which establishes comprehensive measures to promote the increased use and development of renewable energy resources that will greatly benefit the State's economy, environment, energy security and sustainability. DBEDT recommends some modifications to the bill's proposed amendments to more effectively achieve its intent.

This bill provides significant amendments to Hawaii's Renewable Portfolio Standards (RPS) law mandated in Section 269-91, HRS, (1) to require that the electrical energy savings from efficiency measures shall not count towards the RPS starting in 2015; (2) to increase the RPS goal from twenty per cent to twenty-five per cent of net electricity sales by December 31,

2020; and (3) to establish a forty per cent RPS goal by 2030. This bill requires that beginning 2015, one hundred per cent of the renewable portfolio standards shall be met by electrical generation from renewable energy resources. DBEDT strongly supports these amendments to Hawaii's RPS law, and would like to recommend the Committee incorporate the following modification to the bill to further promote and accelerate Hawaii's transition to non-petroleum energy sources.

1) Add the following amendment to Section 269-92(b) as proposed in SB 1671, SD1: **“(4) Effective July 1, 2009, the public utilities commission shall not approve any application by a public utility as defined in section 269-1 to build a new generation facility with a rated capacity greater than two megawatts that uses fossil fuel as the source of electricity generation.”**

These proposed changes will help further strengthen Hawaii's RPS law, and effectively achieve its intent of increasing the development and use of renewable energy resources in Hawaii.

This bill also helps achieve Hawaii's transformation to a clean renewable energy economy by allowing existing net energy metered customers to remain with the current net metering program once alternative credits or compensation mechanisms are created and implemented by the Public Utilities Commission to compensate customer-generators for power produced and exported to the utility grid. DBEDT supports this provision, as we believe that net energy metering is an effective tool in promoting customer-sited renewable energy resources as evident by the significant increases in the number of net energy metered customers across all islands since 2001 when NEM first became a law. At the same time, DBEDT believes that this

provision should include not only existing eligible customer-generators with existing net energy metering contracts, but should also apply to future net energy metered customers. Thus, DBEDT therefore requests and suggests that the committee modify the language the proposed amendment to §269-110 (b) in Section 7 of the bill to read as follows: **“...eligible customer-generators with existing net energy metering contracts shall have the option of maintaining these existing contracts, and future eligible customer-generator shall have the same option to have net energy metering contracts under the current net energy provision rather than converting to new alternative credits or compensation mechanisms.”**

Another major provision in this bill which supports the achievement of the HCEI goal is the creation and designation of renewable energy zones to increase the use and development of renewable energy resources, as well as the identification and qualification of transmission projects and infrastructure crucial to the development of renewable energy resources which may receive assistance in accessing the use of special purpose revenue bonds for financing. We strongly support the bill's proposed inclusion of these statutory functions of creating and designating renewable energy zones, and identifying, qualifying, and assisting access to the use of special purpose revenue bonds to finance transmission projects and infrastructure in the Energy Resources Coordinator's statutory roles and functions as established in Section 196-4, Hawaii Revised Statutes.

DBEDT supports the amendment offered in Section 9 of this bill to expand the definition of “qualified business” in Section 209E-2, Hawaii Revised Statutes, to include businesses engaged in development or production of various types of renewable energy which may qualify for State enterprise zone tax incentives and regulatory flexibility which stimulate business, agricultural, and industrial growth in areas that would result in neighborhood revitalization.

Adding other forms of renewable resources including sun, falling water, biogas, geothermal, ocean water, currents, and waves, biomass, biofuels and hydrogen production from renewable energy sources into the Enterprise Zone (EZ) program is consistent with the current approved business activities which presently include wind energy production. The incentives provided for in the EZ program will provide the impetus to help attract these businesses to Hawaii.

Another major issue addressed by this bill is renewable energy projects' permitting and facilitation. DBEDT supports this bill's amendments to Section 201-12.5 and Sec 201N, Hawaii Revised Statutes. The bill proposes to expand the duties of the renewable energy facilitator by specifying the inclusion of renewable energy facilities' land parcels, production structure or equipment, transmission lines, and on-site infrastructure necessary for the development of renewable energy resources in the definition of renewable energy projects that are qualified for the facilitator's services.

Another important provision of this bill relates to renewable energy permitting and facilitation. DBEDT generally supports Section 11 of this bill, which amends the definition of a "Renewable energy facility" in Section 201N-1. However, the proposed language would only include new renewable energy facility projects with capacity between 5 megawatts and 200 megawatts, or new biofuel production facility projects with production capacity of exactly one million gallons annually, to qualify for designation as renewable energy facilities for the purpose of receiving permitting facilitation process assistance. This proposed language effectively excludes new renewable energy projects with capacity greater than 200 megawatts, and new biofuel facilities with capacity greater than one million gallons annually. DBEDT supports amending the definition of a renewable energy facility in Section 201N-1, and respectfully

suggests to modify the proposed amendment to the definition of Renewable Energy Facility to read as follows: **“Renewable energy facility or “facility” means a new facility located in the [State] state with the capacity to produce from renewable energy at least two hundred megawatts of electricity[~~]~~ provided that new electricity generation facilities with rated capacity between five and two hundred megawatts and new biofuel production facilities with capacity of at least one million gallons per year may apply to the coordinator for designation as renewable energy facility, with such designation to be at the sole discretion of the coordinator.”**

This bill also speeds and clarifies the expediting process for renewable energy facilities permitting by amending Section 201N-4, HRS. DBEDT generally supports these proposed amendments. DBEDT however strongly recommends that the bill includes an appropriation out of the renewable energy facility siting special fund the sum of \$1,000,000 for fiscal year 2009-2010, and the same amount of \$1,000,000 for fiscal year 2010-2011. These requested appropriations which are funded by fees paid by renewable energy developers for the purpose of facilitating the permitting process, will achieve the intent of this section.

This bill provides significant modifications to current energy-related statutes that are critical in achieving the HCEI goals and DBEDT recommends that these amendments become effective on July 1, 2009. Thank you for the opportunity to testify.

LINDA LINGLE
GOVERNOR

JAMES R. AIONA, JR.
LT. GOVERNOR



KURT KAWAFUCHI
DIRECTOR OF TAXATION

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**HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
TESTIMONY REGARDING SB 1258 SD 2 HD 1
RELATING TO RENEWABLE ENERGY**

TESTIFIER: KURT KAWAFUCHI, DIRECTOR OF TAXATION (OR DESIGNEE)

DATE: MARCH 23, 2009

TIME: 2:15PM

ROOM: 325

This bill, among other things, broadens the definition of "qualified business" for purposes of the tax incentives available under the State's enterprise zone program.

The Department of Taxation (Department) defers to the Department of Business, Economic Development, and Tourism regarding the effect of this measure on incentivizing alternative energy.

If amended to provide a current effective date, this measure will result in a revenue loss of approximately \$3.2 million in FY10, \$4.2 million in FY11, and \$5.5 million per year in FY12, FY13 and FY15.

**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
MARCH 23, 2009**

MEASURE: S.B. No. 1258 S.D. 2 H.D. 1

TITLE: Relating to Renewable Energy

Chair Herkes and Members of the Committee:

DESCRIPTION:

This bill includes various amendments related to renewable portfolio standards, net energy metering, the energy resources coordinator, renewable energy resources, the renewable energy facilitator, and renewable energy permitting, which are intended to increase the production and use of renewable energy in the state.

POSITION:

The Public Utilities Commission ("Commission") has no objections to this measure.

Thank you for the opportunity to testify.

Testimony before the House Committee on

Consumer Protection & Commerce

S.B. 1258 SD2 HD1 – Relating to Renewable Energy

Monday, March 23, 2009
2:15 pm, Conference Room 325

By Arthur Seki
Director of 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 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 Hawaiian Electric.

We support S.B. 1258 SD2 HD1, which proposes comprehensive measures for increasing the production and use of renewable energy in Hawaii.

In particular, we support the new language under section (2) of the definition of “renewable electrical energy” in HRS sec. 269-91 that provides that electrical energy savings shall not include customer-sited, grid-connected photovoltaic systems beginning on January 1, 2015. This language is necessary to make it clear that generation of renewable energy using photovoltaic systems would continue to be counted toward RPS after 2014, when electrical energy savings are no longer factored into the calculation of RPS. However, as a clarifying amendment (in **bold**), we propose that the language be **moved** from section (3) of the definition to section (2), where “customer-sited, grid-connected renewable energy systems” is cited as a type of displacement or off-set technology used to bring about electrical energy savings. Section (2) of the definition of “renewable electrical energy” would then read:

- 2) Electrical energy savings brought about by the use of renewable displacement or off-set technologies, including solar water heating, sea-water air-conditioning district cooling systems, solar air-conditioning, and

customer-sited, grid-connected renewable energy systems; provided that, beginning January 1, 2015, electrical energy savings shall not count towards renewable energy portfolio standards; and provided that beginning January 1, 2015, electrical energy savings shall not include customer-sited, grid-connected photovoltaic systems;

As you are aware, Hawaiian Electric is 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 for new contracts related to wind on Maui and Oahu, solar and geothermal on the Big Island and ocean energy for Oahu;
- Short-listed renewable energy projects from the HECO 100 MW RFP for Oahu;
- Installing the 2009 power plant (100 MW) at Campbell Industrial Park to be 100% biofueled;
- Conducting wind integration study on Maui;
- Conducting wind and solar integration study for Big 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 for late 2009;
- Provided 2 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 and a 3rd to follow this year; and
- Evaluating micro-algae for biofuels and ocean energy projects.

In conclusion, Hawaiian Electric supports S.B. 1258 SD2 HD1 with the above amendment. Passage of this bill would provide further guidance and strong support for our concerted efforts to have continued growth in the use of renewable energy throughout the State.

Thank you for the opportunity to testify.

HAWAII RENEWABLE ENERGY ALLIANCE

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Sunpower Corporation

Herbert M. (Monty) Richards
Kahua Ranch Ltd.

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

SB 1258 SD2 HD1, RELATING TO RENEWABLE ENERGY

March 23, 2009

Chair Herkes, Vice-Chair Wakai and members of the Committee, I am Warren Bollmeier, testifying on behalf of the Hawaii Renewable Energy Alliance (HREA). HREA is a nonprofit corporation in Hawaii, established in 1995 by a group of individuals and organizations concerned about the energy future of Hawaii. HREA's 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 HREA's goals is to support appropriate policy changes in state and local government, the Public Utilities Commission ("Commission") and the electric utilities to encourage increased use of renewables in Hawaii.

The purpose of SB 1258 SD2 HD1 are to: (i) make various revisions to renewable energy and net energy metering provisions, and (ii) encourage the development of renewable energy in Hawaii.

HREA **supports** the **intent** of this bill and offers the following comments on and proposed amendments to Part II, Section 2:

- (1) Renewable portfolio standard. We understand the RPS is to be modified in part due to the creation of an energy-efficiency portfolio standard ("EPS") a companion to our RPS law, but in the Section 1 this is not made clear. In Section 2, we believe the RPS should:
 - a. Be realigned based on the creation of the EPS (see also our testimony on SB 1173 SD2 HD1),
 - b. Focus on wholesale renewable energy supplied by Independent Power Producers, generated by the utility and certain wholesale customer-sited generators; and
 - c. Include the renewable portion of municipal solid waste.
- (2) Net Energy Metering. Per Section 7 of the bill, HREA notes that customers will have the right not only to continue existing net metering agreements, but also continue to have the right to enter into new net metering agreements, should the Commission authorize alternative payments, such as Feed-In Tariffs. Net metering is a proven program in Hawaii and should therefore be allowed to continue in support of the Hawaii Clean Energy Initiative.

With our proposed amendments in the attachment, HREA can support this bill.

Thank you for this opportunity to testify.

HREA Testimony Before CPC – 03/23/09
Excerpt from SB 1258 SD2 HD1

PART II

RENEWABLE PORTFOLIO STANDARDS

SECTION 2. Section 269-91, Hawaii Revised Statutes, is amended to read as follows:

"§269-91 [+]Definitions.[+] For the purposes of this [+]part[+]:"

"Biofuels" means liquid or gaseous fuels produced from organic sources such as biomass crops, agricultural residues and oil crops, such as palm oil, canola oil, soybean oil, waste cooking oil, grease, and food wastes, animal residues and wastes, and sewage and landfill wastes.

"Cost-effective" means the ability to produce or purchase electric energy or firm capacity, or both, from renewable energy resources at or below avoided costs consistent with the methodology set by the public utilities commission in accordance with section 269-27.2.

"Electric utility company" means a public utility as defined under section 269-1, for the production, conveyance, transmission, delivery, or furnishing of power.

"Renewable electrical energy" means:

- (1) Electrical energy generated using renewable energy as the source;
- (2) Electrical energy savings brought about by the use of renewable displacement or off-set technologies, including solar water heating, sea-water air-conditioning district cooling systems, solar air-conditioning, and customer-sited, grid-connected renewable energy systems; provided that,

HREA Testimony Before CPC – 03/23/09
Excerpt from SB 1258 SD2 HD1

beginning January 1, 2015, electrical energy savings shall not count towards renewable energy portfolio standards; or

[+] (3) [+] Electrical energy savings brought about by the use of energy efficiency technologies, including heat pump water heating, ice storage, ratepayer-funded energy efficiency programs, and use of rejected heat from co-generation and combined heat and power systems, excluding fossil-fueled qualifying facilities that sell electricity to electric utility companies and central station power projects[-]; provided that beginning January 1, 2015, electrical energy savings shall not count towards renewable energy portfolio standards. Beginning January 1, 2015, electrical energy savings shall not include customer-sited grid-connected photovoltaic-renewable systems which provide wholesale power to the utility under a Feed-In Tariff or other contractual arrangement.

"Renewable energy" means energy generated or produced [utilizing] use the following sources:

- (1) Wind;
- (2) The sun;
- (3) Falling water;
- (4) Biogas, including landfill and sewage-based digester gas;
- (5) Geothermal;
- (6) Ocean water, currents and waves[+], including ocean thermal energy conversion;
- (7) Biomass, including biomass crops, agricultural and animal residues and wastes, and [municipal] solid waste, including

HREA Testimony Before CPC – 03/23/09
Excerpt from SB 1258 SD2 HD1

the renewable fraction of and municipal solid waste facilities;

(8) Biofuels; and

(9) Hydrogen produced from renewable energy sources.

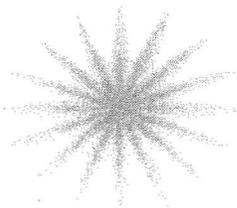
"Renewable portfolio standard" means the percentage of electrical energy sales that is represented by renewable electrical energy."

<Snip>

SECTION 7. Section 269-110, Hawaii Revised Statutes, is amended to read as follows:

"~~§269-110 [Termination by eligible customer-generators.]~~ Eligible customer-generators; termination; alternative credits or compensation mechanisms. (a) If an eligible customer-generator terminates the customer relationship with the electric utility, the electric utility shall reconcile the eligible customer-generator's consumption and production of electricity, including any unused credits for excess electricity from the eligible customer-generator carried over from prior months, for the period following the last twelve-month reconciliation period to the date of termination of the relationship, according to the requirements set forth in this part.

(b) If the public utilities commission, at any time, establishes alternative mechanisms for crediting or otherwise compensating eligible customer-generators for exported power, eligible customer-generators with existing net energy metering contracts shall have the option of maintaining these existing or entering into new net energy metering contracts rather than being limited to converting to new alternative credits or compensation mechanisms."



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Testimony on

S.B. NO. 1258, S.D. 2, H.D. 1 – RELATING TO RENEWABLE ENERGY

Before the

House Committee on Consumer Protection & Commerce
Monday, March 23, 2009, 2:15 p.m., Conference Room 325

By

David Rezachek, Consultant
Honolulu Seawater Air Conditioning, LLC

WRITTEN TESTIMONY ONLY

Good afternoon Chair Herkes, Vice Chair Wakai, and members of the Committee. My name is David Rezachek and I am testifying on behalf of Honolulu Seawater Air Conditioning, LLC (HSWAC).

HSWAC has previously stated its objections to removing renewable energy electricity displacement technologies from the State's renewable energy portfolio standard.

S.B. 1258, S.D. 2, H.D. 1, proposes to do just that by 2015 without any guarantee that an energy efficiency portfolio standard would be in place, or that any of the renewable energy electricity displacement technologies, such as SWAC, would be included.

HSWAC has also expressed other concerns about trying to redefine SWAC, solar water heating, and solar air conditioning as something other than renewable technologies.

Therefore, **HSWAC cannot support Part I of this bill as it is currently written.**

Part III of this bill provides a list of methods that the Energy Resources Coordinator can use to assist renewable energy development in Hawaii. It is not clear if this assistance would apply to renewable energy electricity displacement technologies. **HSWAC respectfully requests that these technologies be included in this Part.**

Part IV of this bill adds a variety of renewable energy technologies to the definition of “qualified business” under the State’s enterprise zone program. HSWAC supports the intent of this Part. HSWAC assumes that SWAC is included as thermal energy from a renewable resource (ocean water). **HSWAC would appreciate a confirmation of this interpretation.**

Parts V and VI, of this bill, facilitate the permitting of renewable energy facilities. **HSWAC respectfully requests that these sections be amended to provide similar assistance to renewable energy electricity displacement technologies.**

HSWAC respectfully requests that this bill be deferred until:

- (1) there is agreement on consistent definitions of “renewable energy” and “energy efficiency” in proposed legislation and in the Hawaii Revised Statutes;
- (2) any changes in the RPS, and the establishment of an energy efficiency portfolio standard, occur together; and
- (3) economic, siting, and permitting assistance is provided to all renewable energy and energy efficiency technologies on an equitable basis and without regard to technology type and/or project size.

HSWAC would be happy to work with other stakeholders to accomplish these objectives.

Thank you for this opportunity to testify.

SUNPOWER

Room # 325 2:15 PM March 23, 2009
SB1258,SD2, HD1 RELATING TO RENEWABLE ENERGY

House Committee on Consumer Protection & Commerce

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 few comments in support of **SB1258, SD2, HD1**.

SunPower Systems Corporation ("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 has been a member of the Hawaii Energy Policy Forum since it convened in 2003 and a member of the Energy Generation working group for the HCEI over the past year. SunPower is also a member of the Solar Alliance which is an intervenor in the Feed-in Docket Investigation at the Hawaii Public Utilities Commission. In the Feed-in Docket the HECO Companies and the Consumer Advocate have proposed the elimination of net metering ("NEM"). SunPower strongly opposes the elimination of net metering for existing and future eligible customers because it has been very effective in encouraging ratepayers to use renewable energy.

Therefore, SunPower strongly supports SB1258, SD2, HD1 and proposes the following amendments to strengthen the bill's purpose of accelerating the penetration of renewable energy in Hawaii: In Section 7, HRS 269-110(b) should be amended to read:

If the public utilities commission, at any time, establishes alternative mechanisms for crediting or otherwise compensating eligible customer-generators for exported power, eligible customer-generators ~~with existing net metering contracts~~ shall have the option of maintaining these existing or entering into new net metering contracts rather than being limited to converting to new alternative credits or compensations mechanisms.

The proposed amendment is consistent with Exhibit A of the Hawaii Clean Energy Agreement which allows for the continuation of the net metering program in Hawaii both for existing and future eligible customer-generators.

NEM has a proven track record in Hawaii and, thus, in order to meet the renewable energy goals laid out in the HCEI, we must continue to support net metering. Thus, the proposed amendment ensures that current and future customer-generators will always have NEM as an option.

NEM induces more entities to install renewable energy systems and reduce their demands on the power grid. This is an important step that will help enable the state to reach its ambitious clean energy goals.

Mahalo for the opportunity to submit testimony.