



**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 FINANCE

Monday, April 6, 2009

2:00 P.M.

State Capitol, Conference Room 308

in consideration of

SB 1258, SD2, HD1
RELATING TO RENEWABLE ENERGY.

Good Afternoon, Chair Oshiro, Vice Chair Lee, 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 modifications to the bill to further promote and accelerate Hawaii's transition to non-petroleum energy sources.

1) Modify the definition of "Renewable electrical energy" by modifying the amendment to Section 269-27.2.(2) to read as follows: **"(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, such electrical energy savings except those resulting from customer-sited, grid connected renewable energy systems shall not count towards renewable energy portfolio standards; or"** This proposed change acknowledges that customer-sited grid connected customer generators produce electrical energy from renewable energy systems and should continue to be counted towards the renewable portfolio standards.

2) Add the following amendment to Section 269- **New fossil fuel-powered electrical generation facilities; prohibition. (a) 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."** This proposed addition to the bill will

substantively contribute to the achievement of the HCEI goal of reducing Hawaii's dependence on imported fossil fuels.

This bill also provides amendments to Section 269-110 to allow 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, and we also recommend that this provision 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 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 FINANCE
TESTIMONY REGARDING SB 1258 SD 2 HD1
RELATING TO RENEWABLE ENERGY**

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

DATE: APRIL 6, 2009

TIME: 2:00PM

ROOM: 308

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 FINANCE
APRIL 6, 2009**

MEASURE: S.B. No. 1258 S.D. 2 H.D. 1
TITLE: Relating to Renewable Energy

Chair Oshiro 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 Commission has no objections to this measure.

Thank you for the opportunity to testify.

SUNPOWER

Room # 308
SB1258,SD2, HD1

2:00 PM April 6, 2009
RELATING TO RENEWABLE ENERGY

House Committee on Finance

Chair Oshiro, Vice-Chair Lee 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 according to the net metering guidelines set forth by the PUC, 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.

Testimony before the House Committee on

Finance

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

Monday, April 6, 2009
2:00 pm, Conference Room 308

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

Chair Oshiro, Vice Chair Lee 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.



HOUSE COMMITTEE ON FINANCE

April 6, 2009, 2:00 P.M.

Room 308

(Testimony is 4 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 1258 SD2 HD1 WITH AMENDMENTS

Chair Oshiro and members of the committee:

The Blue Planet Foundation strongly supports SB 1258 SD2 HD1, establishing electric generation and delivery initiatives necessary for and contributing to the transition of Hawaii's energy sector to 70 percent non-petroleum energy sources by 2030.

Hawai'i is the most dependent state in the nation on imported oil. Some 50 million barrels are imported annually, nearly 80% of which originate from foreign sources¹. In addition, over 805,000 tons of coal are imported into our state². These sources provide power for over 92% of Hawaii's electricity generation. The combustion of these resources also contributes over 23 million tons of climate changing greenhouse gas into our atmosphere annually³. Hawaii's economic, environmental, and energy security demand that we reduce the amount of fossil fuel imported and consumed in Hawai'i. To that end, new policies are critically needed that will dramatically increase energy efficiency, build our smart energy infrastructure with storage, and develop clean, renewable, and indigenous energy sources

Our testimony will address each part of the bill separately.

Part 2. Renewable Portfolio Standards.

Part 2 of SB 1258 SD2 HD1 redefines and increases Hawaii's existing renewable portfolio standards. Blue Planet strongly supports this policy in conjunction with the energy efficiency portfolio standards contemplated by another measure pending before this Committee (SB 1173). We believe that this percentage is not only achievable, but required given the new realities of fossil fuel prices and global climate change.

¹ The State of Hawaii Data Book, 2007

² *Ibid.*

³ ICF International. Inventory of Greenhouse Gas Emissions and Sinks in Hawaii: 1990 and 2007. December 2008.

Jeff Mikulina, executive director • jeff@blueplanetfoundation.org

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The original intent of the bill that became Act 95 in 2004 was to set Hawai'i down the path of producing more renewable power. Unfortunately, the "standard" enacted falls far short. The Act left major loopholes that would allow Hawaii's utilities to meet the standards without ever siting a new renewable power facility.

While Act 95 has been called a Renewable Portfolio Standard (RPS), it would be more accurate to call it an "Efficiency Portfolio Standard." Senate Bill 1258 SD2 HD1 will create a true RPS to drive the state's clean energy market. While striving to increase the amount of energy conservation in Hawai'i should remain a key component to the State's energy strategy, a policy to incrementally increase the amount of clean, indigenous energy generated within the state will increase Hawaii's economic security and self-sufficiency and reduce the impact of electricity production on our environment.

A true RPS would contain the following elements:

- RPS targets must be achieved only by electricity produced from renewable energy resources, and repeal the definition of energy efficiency gains as renewable resources for the purpose of the RPS;
- Eliminate "off-ramps" for failure to meet the standards; and
- Establish penalties for utilities' non-attainment of RPS target.

Finally, while we appreciate the increased RPS levels set by SB 1258 SD2 HD1, Blue Planet believes Hawai'i can be much more aggressive at increasing clean energy use. We suggest that SB 1258 SD2 HD1 be amended to contain the following RPS levels:

- 20% of net electricity sales by 2015;
- 30% by 2020;
- 40% by 2025; and
- 50% by 2030.

Setting an aggressive, clear energy efficiency standard and high renewable portfolio standard will mobilize the whole state to move towards our preferred energy future.

Part 3. Net Energy Metering

Part 3 of SB 1258 SD2 HD1 amends Hawaii's net metering law. After wisely being passed in 2001, net energy metering began slowly 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 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. Senate Bill 1258 SD2 HD1 should pick up where prior legislation left off—eliminating the cap on the amount of net energy metering allowed on the grid. **Blue Planet supports amending SB 1258 SD2 HD1 to contain the cap and system size removal language found in the original SB 1675.**

The benefits of expanding net energy metering are numerous:

- Private individuals invest in the power plants of tomorrow—instead of ratepayers. Each new installed system can reduce the need to construct massive, expensive power plants, with all of their associated siting, environmental, and financial impacts. Private investors take on the risk of such investments, not ratepayers such as families and businesses.
- Diversified and decentralized power strengthens the power grid, providing more buffering from blackouts, oil price spikes, and accidents.
- Decentralized power reduces the need for infrastructure and powerlines.
- The allowable net energy systems in this program are clean and have less impact on Hawaii's environment than coal and oil-fired powerplants.
- Growth in the renewable energy industry in Hawai'i creates jobs and high-tech business opportunities—diversifying Hawaii's economy.
- A clean kilowatt from photovoltaic systems or other clean energy devices is worth much more for Hawai'i than a fossil fuel kilowatt. We should ensure that it is given at least as much value on the market.

Parts 4 and 5. Energy Resources Coordinator and Renewable Energy Resources

Part 4 of SB 1258 SD2 HD1 clarifies and further defining duties and responsibilities of the state energy office. We view these parts of SB 1258 SD2 HD1 as relatively straightforward housekeeping amendments that provide more depth in defining the duties of the increasingly important energy office.

Blue Planet believes, however, that it may be time to consider elevating the level of energy planning and implementation in Hawai'i. If we are serious about ending our addiction to fossil fuel and seek to be powered by 100% clean, renewable, and indigenous sources, the government office charged with guiding the transition deserves greater standing and funding within state government. We would support the creation of a state Hawai'i Energy Security Authority (HESA), something akin to the existing Hawai'i Tourism Authority (HTA). HESA would be a stand-alone entity, tasked with all aspects of planning, permitting, and implementation of Hawaii's clean energy future. The Authority would be funded solely from a fee on each barrel of oil imported into the state; as dependency on oil decreases, so does the work of the Authority, and the budget decreases accordingly. Given Hawaii's energy independence the status, funding, and prioritization it deserves would help ensure that we achieve our clean energy goals.

Nonetheless, the simple changes in parts 4 and 5 SB 1258 SD2 HD1 are supported as an interim step.

Part 6. Renewable Energy Facilitator

Part 6 of SB 1258 SD2 HD1 expands the types of projects that the renewable energy facilitator is asked to address. We generally support the intent of this part.

Part 7. Renewable Energy Permitting

Part 7 of SB 1258 SD2 HD1 vastly expands the type of renewable energy projects that will go through the fast-track permitting process and allows for automatic approval of projects after a certain amount of time has passed. Blue Planet greatly appreciates efforts to facilitate clean energy projects and give them priority permit processing and we appreciate the amendments made by the House Committee on Energy & Environmental Protection to clarify this permitting process. We are concerned, however, with the automatic approval of any type of permit, as such an action could negatively impact Hawaii's environment, impinge on residents' due process rights, and create negative backlash against clean energy. We respectfully ask that SB 1258 SD2 HD1 be amended by simply removing any "automatic permit approval" triggers.

First, through analyzing the history of clean energy developments in Hawai'i, environmental disclosure and permitting hurdles are lower on the list than obstacles such as financing, land acquisition, and interconnection agreements with the electric utility. In fact, interconnection agreements seem to be the biggest roadblock. For example, consider the Maui windfarm at Kaheawa Pastures. At the public hearing on the conservation district use permit—the main environmental approval that was needed—33 individuals and organizations testified and all were in support. The interconnection agreement with Maui Electric, however, took years to negotiate, with much frustration on the part of the wind developer.

Second, our existing permitting process protects the environment and the public's right to provide input in the decision making. ***This usually makes for better siting and development decisions.*** Given that many of our indigenous energy resources will be harnessed in remote or ecologically sensitive areas, proper permitting and analysis are crucial. Again in the Kaheawa Pastures case, through the existing permitting process an agreement was reached to protect the Nene and other species. But expediting permitting of new renewable energy facilities—particularly those that are located in wild areas—may cause important resource protection measures to be overlooked. In fact, one of the environmental impacts caused by the Kaheawa Pastures wind farm related to grading the steep road up to the wind farm location. Yet this part of SB 1258 SD2 HD1 allows for the automatic approval of permits for such projects—regardless of environmental impact.

Third, some of the "renewable energy facilities" contemplated in this section may be truly fossil fuel facilities in disguise. A recent proposal to produce biofuel by Kauai Ethanol LLC sought a covered source air permit to burn imported coal at the facility to convert molasses to ethanol.

Again, while we greatly appreciate the intent behind this part of SB 1258 SD2 HD1 —ostensibly to expedite the development of renewable energy sources in Hawai'i—we fear that faulty decision making may result if agencies and commissions are forced to respond to looming automatic approval deadlines at the expense of reduced public input and deliberation. It makes more sense to spend the extra months getting the permitting right than to spend years in court.

Thank you for the opportunity to testify.

**DOWLING
COMPANY, INC**

Room # 308 2:00 PM April 6, 2009

SB1258,SD2,HD1 RELATING TO RENEWABLE ENERGY

Chair Oshiro, Vice-Chair Lee and Committee Members:

Introduction: My name is Jennifer Stites and I am the Green Development Manager for Dowling Company, Inc. ("DCI"). DCI is a Maui-based real estate development company that is committed to sustainable development. To guide this effort and determine our performance metrics, we have adopted the nationally recognized U.S. Green Building Council's ("USGBC") Leadership in Energy and Environmental Design ("LEED") rating system. We are especially proud and excited that DCI's first USGBC LEED certified project was our own office located in Wailuku, Maui. Our office was also the first USGBC LEED certified office on Maui.

It is DCI's understanding that HECO is proposing to eliminate Net Metering if the PUC approves Feed-in Tariffs. DCI strongly opposes the elimination of net metering for existing and future eligible ratepayers because it has been very effective in encouraging ratepayers to use renewable energy. Therefore, DCI strongly supports SB1258, SD2, HD1, but 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 according to the net metering guidelines set forth by the PUC, 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.