

LIFE OF THE LAND

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Bill No. 1258

Support Y N

Date 3/15/09

Time 1405

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COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Hermina M. Morita, Chair

Rep. Denny Coffman, Vice Chair

Tuesday, March 17, 2009

8:30 a.m.

Conference Room 325

SB 1258 RELATING TO RENEWABLE ENERGY. CONCERNS

Aloha Chair Morita, Vice chair Coffman and Members of the Committee

My name is Henry Curtis and I am the Executive Director of Life of the Land, Hawai'i's own energy, environmental and community action group advocating for the people and `aina for almost four decades. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

Under existing state law, the state could use only coal for electricity production and yet have a Renewable Portfolio Standard of 150%. A system which uses distributed coal to produce 3 units of heat and two units of electricity has an

$$\text{RPS} = \frac{3 \text{ units renewable energy (coal heat)}}{2 \text{ units (electricity)}} = 150\%$$

SB 1258 increases the use the RPS requirement without cleaning up either the definition of "renewable energy" or "percentage"

SB 1258 focuses on renewable energy zones, which in Hawai`i is anyplace that (a) the sun shines; (b) the wind blows; (c) the ocean rises and falls; (d) vegetation grows; and (e) there are varying temperature layers (geothermal, ocean thermal). That is, everywhere. It includes all land, roofs, and ocean areas.

Do we need new transmission lines to access rooftop wind and solar resources?
Do we need automatic approval?

No!!!

We need to mandate that the only new energy systems that will be permitted in the state are low-climate-impact real-renewable-energy systems.

Mahalo

Henry Curtis

**Testimony before the
House Committee on

Energy & Environmental Protection

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

Tuesday, March 17, 2009
8:30 am, Conference Room 325

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

Chair Morita, Vice Chair Coffman 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, which proposes comprehensive measures for increasing the production and use of renewable energy in Hawaii.

We respectfully offer a clarifying amendment to Part II of the bill on Renewable Portfolio Standards (“RPS”), where the bill proposes to modify the definition of “renewable electrical energy” under Hawaii Revised Statutes (“HRS”) § 269-91. Under the proposed change to section (2) of the definition, electrical energy savings would not count towards RPS beginning 2015. Those savings include “customer-sited, grid-connected renewable energy systems.” Without clarification, this language could mean that generation of renewable energy using photovoltaic systems would no longer count toward RPS from 2015. Therefore, we suggest that the language be clarified (**in bold**) as follows:

- (2) Electrical energy savings brought about by the use of renewable displacement or off-set technologies, including solar water heating, seawater air-conditioning district cooling systems, solar air-conditioning, and customer-sited grid-connected renewable energy systems; provided that, beginning in 2015, electrical energy savings will not count towards renewable energy portfolio standards, **except those savings brought**

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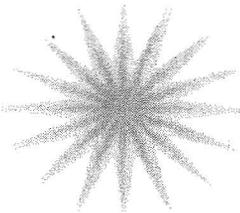
about by the use of customer-sited, grid-connected photovoltaic systems:

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 S2 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.



Honolulu Seawater Air Conditioning, LLC

Affiliate of Renewable Energy Innovations, LLC, the COOL GREEN & CLEAN™ Company

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Bill No. 1258
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Date 3/16/09
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Testimony on

S.B. NO. 1258, S.D. 2 – RELATING TO ENERGY RESOURCES

Before the
House Committee on Energy & Environmental Protection
Tuesday, March 17, 2009, 8:30 a.m., Conference Room 325

By

David Rezachek, Consultant
Honolulu Seawater Air Conditioning LLC

Good morning Chair Morita, Vice Chair Coffman, 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, 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.

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
MARCH 17, 2009

Bill No. 1258

Support **Y N**

Date 3/16/09

Time 1133

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

Chair Morita and Members of the Committee:

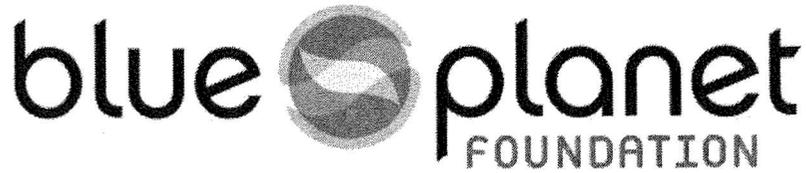
DESCRIPTION:

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.



Bill No. 1258

Support Y N

Date 3/16/09

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HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
March 17, 2009, 8:30 A.M.
Room 325

(Testimony is 4 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 1258 SD2 WITH AMENDMENTS

Chair Morita and members of the committee:

The Blue Planet Foundation strongly supports SB 1258 SD2, 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.

Hawaii 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 Hawaii. 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 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 the legislature (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.

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 Hawai'i'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 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 Hawai'i'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, Blue Planet believes Hawai'i can be much more aggressive at increasing clean energy use. We suggest that SB 1258 SD2 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 amends Hawai'i'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 should pick up where prior legislation left off—eliminating the cap on the amount of net energy metering allowed on the grid.

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 clarifies and further defining duties and responsibilities of the state energy office. We view these parts of SB 1258 SD2 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 of SB 1258 SD2 are supported as an interim step.

Part 6. Renewable Energy Facilitator

Part 6 of SB 1258 SD2 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 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. We are concerned, however, with the automatic approval of any type of permit, as such an action could negatively impact Hawai'i's environment, impinge on residents' due process rights, and create negative backlash against clean energy. We respectfully ask that this part of SB 1258 SD2 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 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—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 an extra month or two to get the permitting right than to spend five years in court.

Thank you for the opportunity to testify.