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TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

THE TWENTY-FIFTH LEGISLATURE
REGULAR SESSION OF 2009

WEDNESDAY, FEBRUARY 18, 2009
2:00 P.M.

TESTIMONY OF CATHERINE P. AWAKUNI, EXECUTIVE DIRECTOR, DIVISION OF
CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER
AFFAIRS TO THE HONORABLE REPRESENTATIVE ROBERT HERKES, CHAIR,
AND MEMBERS OF THE COMMITTEE

HOUSE BILL NO. 1843, HOUSE DRAFT 1 – RELATING TO RENEWABLE ENERGY.

DESCRIPTION:

This bill establishes measures to increase the production and use of renewable energy in the state.

POSITION:

The Division of Consumer Advocacy (“Consumer Advocate”) supports the intent of the measure.

COMMENTS:

Section 2 prohibits the Hawaii Public Utilities Commission (“Commission”) from issuing a certificate of public convenience and necessity (“CPCN”) for the construction or operation of a new electrical generation facility solely from the combustion of any type of fossil fuel, except under extraordinary circumstances, as determined by the Commission. Limitation of a CPCN in Hawaii Revised Statutes § 269-7.5 is not appropriate, since the Commission does not grant CPCNs for electrical utility generation. Instead, the Commission approves the commitment of funds greater than \$2.5 million dollars by an electric utility, pursuant to the Commission’s General Order No. 7. Therefore, it would be most appropriate to create a new section for this limitation.

Section 3 amends the definitions of “renewable energy” and “renewable electrical energy” to include renewable displacement and off-set technologies and exclude energy efficiency savings after January 1, 2015, and section 4 increases the renewable portfolio standards (“RPS”) targets to 25% in 2020 and 40% in 2030.

The Consumer Advocate has previously questioned the appropriateness of utilities using energy efficiency savings to accurately measure the utilities’ “net electricity sales” for RPS purposes. The Consumer Advocate supports the exclusion of energy efficiency from the RPS to the extent that an energy efficiency standard will be adopted, as is being contemplated in another measure being heard by this Committee today. The establishment of an energy efficiency standard, the exclusion of energy efficiency from the RPS, and the increase in RPS targets result in a more logical approach to RPS and loftier goals for clean energy in the State. The approach also is consistent with the Consumer Advocate’s agreement with the State and the HECO Companies, signed on October 20, 2008.

Thank you for this opportunity to testify.



**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 18, 2009
2:00 p.m.
State Capitol, Conference Room 325

in consideration of
HB 1843, HD1
RELATING TO RENEWABLE ENERGY.

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

House Bill 1843, HD1, establishes comprehensive measures for increasing the production and use of renewable energy in the State, necessary for and contributing to the achievement of the Hawaii Clean Energy Initiative's goal to transition Hawaii to seventy percent renewable energy resources-based economy by 2030. The Department of Business, Economic Development, and Tourism (DBEDT) supports this bill, and we would like to offer some suggestions for the committee's consideration to further enhance the provisions of this bill to more effectively achieve its intent of increasing the production and use of renewable energy in Hawaii.

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The significance of this bill towards achieving Hawaii's energy goals of energy independence and security with its attendant benefits to the economy and the environment cannot be overstated. Currently, the Hawaii utilities use fossil fuel to generate over ninety per cent of the total electricity they sold, which represents approximately twenty-five per cent of Hawaii's total oil imports. Only about nine per cent of the electricity sold is generated from renewable resources.

Any new fossil fuel-based generation installed today will have a useful lifetime of 30 to 50 years or more, and will perpetuate Hawaii's dependence on imported oil for another generation, compromising Hawaii's energy security, Hawaii's economy, and Hawaii's environment. More importantly, the economic risks and high price volatility of Hawaii's heavy dependence on imported fossil fuel for electricity generation are currently borne entirely by Hawaii's consumers. To the extent possible, future requirements for energy must be met by electricity generation from renewable resources and energy efficiency.

HB 1843, HD1, provides a number of important and achievable measures that will help to significantly reduce Hawaii's dependence on imported fossil fuel for electricity generation. Part I of this bill provides amendments to Section 196 and Section 269-7.5, Hawaii Revised Statutes (HRS), to prohibit the permitting and issuance of certificate for the construction or operation of a new fossil-based only electricity generation facility except under extraordinary circumstances as determined by the Public Utilities Commission ("PUC" or "Commission"). It also provides amendments to Section 269-91 to require that starting in 2015 the electrical energy savings and efficiency measures will not count towards the Renewable Portfolio Standards (RPS); to increase the RPS goal from twenty per cent to twenty-five per cent of net electricity sales by December

31, 2020; and to establish a forty per cent RPS goal by 2030. DBEDT notes that these amendments to the RPS goals are relatively conservative compared to the Long Island Power Authority's (LIPA) RPS goal of forty percent by 2015.

While DBEDT strongly supports these provisions, we believe that in order to optimally strengthen and accelerate the achievement of the RPS, the prohibition should not be limited to fossil-only generation units. DBEDT suggests that to have a clear commitment to achieve the RPS, the prohibition should extend to any generation units which have fossil fuels components. We support an exemption of this prohibition for generation units of two megawatts or less, so as not to impact small distributed generation units that help provide system reliability. DBEDT also believes that allowing the PUC the authority to allow a new fossil-based only generation under "extraordinary circumstances" as determined by the Commission weakens this prohibition, and further postpones the day when Hawaii reaches a future based on clean, renewable energy sources. We respectfully suggest that the Committee deletes this PUC authority in the language of the bill, and change the reference to "*fossil-only generation units*" to "*fossil generation units.*"

Part II of HB 1843, HD1, provides amendments to Section 196-4 to expand the statutory role and duties of the Energy Resources Coordinator (ERC) to include the development of a systematic process to identify, create, and designate renewable energy zones. It also expands the duties of the renewable energy facilitator by including the permitting of the land parcels on which the facility is situated including the transmission system and infrastructure. The creation of renewable energy zones and the facilitation of transmission projects and infrastructure are vital elements in the transformation of Hawaii's economy from one that is heavily dependent on

imported fossil fuel to one that is powered by clean indigenous renewable energy. DBEDT believes that this function is best served by the ERC whose current functions and energy programs already support this requirement. Furthermore, the ERC's relationships and partnerships with federal entities and national laboratories such as the US Department of Energy and the National Renewable Energy Laboratory will effectively enable the collection and analysis of data and information necessary in identifying geographic areas that are rich with renewable energy resource potential that may be designated as renewable energy zones.

HB 1843, HD1, also amends and expands the definition of "qualified business" in Section 209E-2, Hawaii Revised Statutes, to include renewable energy developers and producers in the Hawaii enterprise zone and qualify for the zone's tax incentives and regulatory flexibility to stimulate business, agricultural, and industrial growth. Adding other forms of alternative energy from 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 includes wind energy production.

Another important provision of this bill relates to renewable energy permitting and facilitation. DBEDT generally supports Part V of this bill, which amends the definition of a "Renewable energy facility" in Section 201N-1, and clarifies the permitting process and approval in Section 201N-4. 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 suggest to modify the proposed amendment 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 biofuel production facilities with capacity of at least one million gallons per year and new electricity generation facilities with rated capacity between five and two hundred megawatts may apply to the coordinator for designation as renewable energy facility, with such designation to be at the sole discretion of the coordinator.”

In Section 10, this bill expedites and clarifies the permitting process for renewable energy by amending Section 201N-4, Hawaii Revised Statutes, to require the pertinent permitting agency to provide the Energy Resource Coordinator with a report identifying diligent measures being taken by the agency to process and act upon the permit, within thirty days following the twelfth month after any permit which is part of an approved permit plan has not yet been approved or denied. DBEDT strongly supports this amendment, but believes that there is a need for additional language to effectively expedite the permitting process. We respectfully request and support inclusion of a language to indicate that if no further processing and action are reported by a permitting agency within five months, the permit shall be deemed approved.

DBEDT supports HB 1843, HD 1, and believes that the inclusion of the suggested changes to the language of this bill, will substantively enable the achievement of the State’s goal

of a secure, clean energy future by increasing the use and development of renewable energy resources.

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 18, 2009**

MEASURE: H.B. No. 1843 H.D. 1
TITLE: Relating to Renewable Energy

Chair Herkes and Members of the Committee:

DESCRIPTION:

This bill establishes measures to increase the production and use of renewable energy in the state.

POSITION:

The Public Utilities Commission ("Commission") supports the intent of this bill and requests that the committee revise the proposed amendment to Section 269-7.5, Hawaii Revised Statutes.

COMMENTS:

This version of the bill, among other things, provides the Commission with the authority, under extraordinary circumstances to issue a certificate of public convenience ("CPCN") to a new fossil fuel electrical generating facility. The Commission does not issue CPCNs to electrical generating facilities and thereby recommends the committee add a new section to be appropriately designated and to read as follows:

§269- _____ The commission shall not approve the construction or operation of a new electrical generation facility that produces electrical energy solely from the combustion of any type of fossil fuel; provided that, under extraordinary circumstances, as determined by the commission, an approval may be granted by the commission.

Thank you for the opportunity to testify.

Testimony before the House Committee on

Consumer Protection and Commerce

H.B. 1843 HD1– Relating to Renewable Energy

Wednesday, February 18, 2009
2:00 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 strongly support H.B. No. 1843 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 (3) 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 H.B. No. 1843 HD 1 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.

Testimony Before the House Committee on
Consumer Protection and Commerce

By Michael V. Yamane P.E.
Senior Electrical Engineer
Kauai Island Utility Cooperative
4463 Pahee Street, Suite 1, Lihue, Hawaii, 96766-2000

Wednesday February 18, 2009, 2:00p.m.
Conference Room # 325

House Bill No. 1843, H.D. 1 – Relating to Renewable Energy.

To the Honorable Robert Herkes, Chair; Glenn Wakai, Vice-Chair, and Members of the Committee:

Thank you for the opportunity to testify on this measure. My name is Mike Yamane, representing Kauai Island Utility Cooperative (KIUC). I am here today to testify in support of H.B. No. 1843, H.D. 1 and would like to provide comment on the provision of the bill regarding the prohibition against the building of new generators utilizing fossil fuels.

KIUC is the only electric cooperative in the State of Hawaii, and the only electric utility serving the people on the island of Kauai. Unlike the for-profit, investor-owned, and much larger utility companies in Hawaii, KIUC is member-owned, its shareholders and ratepayers being one in the same. KIUC members elect the Board of Directors through a democratic process and this Board, along with KIUC staff, develops KIUC's Strategic Plan.

KIUC'S Strategic Plan sets forth two priorities: (1) to generate at least 50% of our electricity from renewable energy sources by 2023, a goal that will lower KIUC's greenhouse gas emissions to 1990 levels; and (2) to commit to fair and equitable rates for reliable service. As evidenced by its priorities, KIUC is committed to breaking the State's dependence on foreign oil and to taking steps to protect our environment but KIUC also needs to ensure the viability of the cooperative for the sake of its members/customers. Thus, a balance has to be struck between what would otherwise appear to be competing interests to enable actual change over time to occur.

That balance could be jeopardized if this bill contained an absolute prohibition against the building of new generators that burn fossil fuels. Reasonably, the prohibition in sections 1 and 2 of this bill does not go to that extreme.

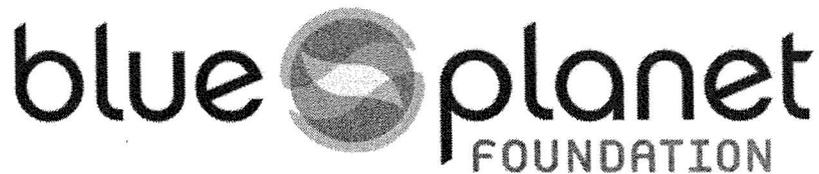
Sections 1 and 2 prohibit the building of generators that utilize *solely* fossil fuels and provide the Public Utilities Commission with the discretion to lift the prohibition under extraordinary circumstances. This flexibility allows utilities such as KIUC to work toward increasing its renewables while still being able to ensure an adequate supply of electricity, at an affordable rate, to its members/customers. It is for these reasons KIUC supports HB 1843 H.D. 1.

Testimony on H.B. No. 1843, H.D. 1

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February 17, 2009

Thank you for the opportunity to testify today on behalf of KIUC.



HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 18, 2008, 2:00 P.M.

Room 325

(Testimony is 3 pages long)

TESTIMONY IN STRONG SUPPORT OF HB 1843 HD1

Chair Herkes and members of the committee:

The Blue Planet Foundation strongly supports House Bill 1843 HD1, establishing comprehensive measures for increasing the production and use of renewable energy in Hawai'i.

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

The first part of HB 1843 HD1 is a prohibition of the addition or expansion of any new fossil fuel burning facilities for electricity generation. Fossil fuels are simply not part of Hawaii's clean energy future. Hawai'i state policy should reflect our preferred energy future powered by clean, indigenous, renewable sources of electricity.

To be clear, HB 1843 HD1 is not a prohibition on existing fossil fuel electricity generating facilities; it is prospective in nature, only addressing future projects. It also allows the public utilities commission to grant permits for a fossil fuel facility in extraordinary circumstances—an exemption that can be revisited by the legislature in the future as more capable storage technologies come online or indigenous biofuel sources become more readily available.

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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Blue Planet Foundation is committed to creating Hawaii's clean energy future. Our goal is making Hawai'i energy independent by 2020. New fossil fuel facilities play no role in Hawaii's clean energy future.

Sections 3 and 4 of HB 1843 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 measures pending before this committee. We believe that this percentage is not only achievable, but required given the new realities of fossil fuel prices and global climate change.

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." House Bill 1843 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 HB 1843 HD1, Blue Planet believes Hawai'i can be much more aggressive at increasing clean energy use. We suggest that HB 1843 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.

Parts 2 of HB 1843 HD1 clarifies and further defines the duties and responsibilities of the state energy office. We view this part of HB 1843 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 2 and 3 of HB 1843 HD1 are supported as an interim step.

Parts 4 and 5 of HB 1843 HD1 expand the types of projects that the renewable energy facilitator is asked to address and further defines the facilitation process. Blue Planet generally supports the intent of these parts.

Thank you for the opportunity to testify.