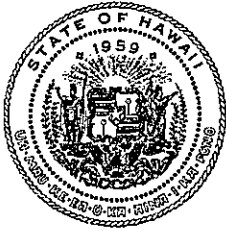


SB 2670



**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
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
Tuesday, February 9, 2010
3:00 PM
State Capitol, Conference Room 225

in consideration of
SB 2670
RELATING TO FOSSIL FUELS

The Department of Business, Economic Development, and Tourism (DBEDT) strongly supports SB 2670, an Administration measure, which would restrict the construction of new power plants that can only use fossil fuels.

Specifically, the bill would revise HRS §269-91 and HRS §269-92 to prohibit the construction of new electric generation units with capacities greater than two megawatts unless they are capable of using non-fossil fuels. Exceptions may be allowed by the Public Utilities Commission if the applicant for an exception is an electric utility which demonstrates compliance, and the ability to maintain compliance, with the state's Renewable Portfolio Standards statute. Furthermore, the annual heat input to the new electric generation units from biomass fuels must exceed the annual heat input from fossil fuels. A "new electric generation unit" is defined as unit without an air permit which is seeking PUC approval of a certificate of public convenience and necessity pursuant to section 269-7.5 after June 30, 2010 and does not include retrofits of existing power generation units to improve their efficiency.

Restricting the construction of new fossil fuel power plants is a definitive step toward achieving the aims of the Administration's current statutory energy programs as well as the Hawaii Clean Energy Initiative's goal of attaining 70% clean energy by 2030. If we are to transform our energy system from one which is almost completely dependent on imported fossil fuels to one which relies extensively on efficiency and renewable energy resources, we must curb the use of fossil fuels for electricity generation.

Presently, Hawaii relies on imported oil for about 86% of its primary energy. Taking imported oil and coal together, Hawaii residents are dependent on fossil fuels for almost 92% of our energy consumption. In 2008, approximately 75% of the net megawatt-hours of electricity generated in Hawaii were derived from oil.

Hawaii's dependence on imported oil has wreaked havoc on our economy. Disruptions in the world oil market half a world away — be they related to military action, economic sanctions, bad weather or accidents — have a disproportionate impact on the prices of our electricity, gasoline and propane. Hawaii pays among the highest prices in the US for electricity and fuel.

When our oldest oil-fired power plants were built, petroleum was relatively inexpensive and seen as a stable commodity. In past decades, Hawaii imported as much as half of its oil from a domestic source: Alaska. However, as Alaska's North Slope oil fields declined in production, we imported increasing amounts from foreign nations. At the end of 2008, the last year for which we have complete data, Hawaii imported only 4% of its oil from Alaska.

Overwhelmingly, our oil comes from non domestic sources: Saudi Arabia, Vietnam, Indonesia, from China, Brunei, Oman, Malaysia, and others.

These foreign countries now control Hawaii's economic destiny. Our future will remain in the hands of other nations and the volatile world oil market until we wean ourselves from fossil fuels and create an economy based on indigenous, sustainable renewable energy.

In 2008, consumers spent an estimated \$8.4 billion for energy, about 13% of Hawaii's \$64 billion gross state product. In that year alone, about \$4 billion were exported beyond our shores to pay for the 43 million barrels of oil we used in state.

Apart from its economic impact, oil dependence compromises our energy security. A state dependent on a fragile petroleum umbilical cord is a state which will suffer disproportionately if that umbilical is cut due to natural disasters or human interference.

Environmental impacts of fossil fuel extraction, transport, and use are also a concern.

In summary, clean energy will reduce the impact of oil's price volatility on the State's economy while protecting the environment, improving energy security, and diversifying Hawaii's economy.

This bill incorporates flexibility to allow utilities and independent power producers to use multiple fuels, while ensuring that Hawaii's energy system investments reflect Hawaii's energy objectives.

I strongly encourage your support of this bill. Thank you for the opportunity to offer these comments.

**Testimony before
The Senate Energy & Environment Committee**

**Colton Ching
Manager, Corporate Planning
Hawaiian Electric Company, Inc.**

**Tuesday, February 9, 2010
3:00 pm**

on SB 2670 – Relating to Fossil Fuels

Chair Gabbard, Vice Chair English and Members of the Committee:

My name is Colton Ching and I am testifying on behalf of the Hawaiian Electric Companies, which is comprised of Hawaiian Electric Company, Inc., Maui Electric Company, and Hawaii Electric Light Company.

SB 2670 prohibits the Public Utilities Commission from issuing a certificate of public convenience and necessity for new electrical generation facilities that can only use fossil fuels as their energy source. It also prohibits electric utilities from entering agreements to purchase electricity from fossil-based electric generation units built after December 31, 2010, unless an electric utility complies with the Renewable Portfolio Standard (RPS) and the electric generation units' annual actual heat input from biomass fuels exceeds the annual actual heat input from fossil fuels.

Under the Energy Agreement our companies signed as part of the Hawaii Clean Energy Initiative, our utilities have already committed not to add any new fossil fuel-based generation. We are therefore committed to the intent of this bill; however, we have several concerns with its details.

Section 2 of the bill is unclear of its intent and needs to be more defined and specific. Currently, "New Electrical Generating Unit" is defined as a unit without an air permit seeking PUC approval. This may be interpreted to mean individual generating units like a wind farm or wind turbine, a PV system, OTEC, etc., that do not produce any air emissions and thus do not have an air permit. However, it may also be interpreted to mean a combustion unit that does emit air emissions but at the time of a PUC application has yet to obtain an air permit.

Ambiguities in Section 2 of the bill may lead to unintended consequences in Section 3. This section possibly implies that if the utility cannot demonstrate or is not in compliance with the RPS, then it cannot build a biomass or liquid biofuel generating unit, including 100% biofueled ones in order to obtain RPS compliance.

Section 3 is also problematic because it would prevent the HECO companies from amending or entering into a new contract with an existing 100% fossil fueled-based Independent Power Producer (IPP) to partially biofuel their unit at anything less than 50%. That may have the unintended consequence of forcing them to keep their operations using 100% fossil fuel instead of partially biofuelling. Also, it is our understanding that under the existing federal Public Utility Regulatory Policies Act of 1978 (PURPA), IPP generating units which have existing contracts to sell electricity to the utility retain those rights (including using the same fossil-based generation if it can do so under utility avoided cost) even if PURPA is repealed. If so, then this provision may violate federal rules.

For these reasons, we respectfully ask that this measure be held. Thank you for the opportunity to present these comments.

**TESTIMONY OF CARLITO P. CALIBOSO
CHAIRMAN, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
SEANTE COMMITTEE ON ENERGY & ENVIRONMENT
FEBRUARY 9, 2010**

**MEASURE: S.B. No. 2670
TITLE: Relating to Fossil Fuels**

Chair Gabbard and Members of the Committee:

DESCRIPTION:

This bill amends section 269-91, Hawaii Revised Statutes ("HRS"), by adding a new definition for "new electric generation unit." In addition, section 269-92, HRS is amended to allow the Hawaii Public Utilities Commission ("Commission") to establish renewable portfolio standards ("RPS") for each utility provided that the Commission shall not approve applications to build additional new electric generation with a rated capacity of more than two megawatts, unless the units are capable of using non-fossil fuels. The bill provides for Commission approval of a unit if the applicant is an electricity utility company and applicant demonstrates the ability to comply with the RPS standards in Section 269-92, HRS; and further provided that the annual actual heat input to the proposed units from biomass fuels exceeds the annual heat input from fossil fuels.

POSITION:

The Commission defers to the legislature in this policy determination and provides the following comment relating to Commission's review of new electric generating facilities.

COMMENTS:

The Commission does not issue "a certificate of public convenience and necessity" for new electric generating facilities. Rather the electric utility company will file an application with the Commission for approval to commit funds for the project.

Thank you for the opportunity to testify.



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COMMITTEE ON ENERGY AND ENVIRONMENT

Senator Mike Gabbard, Chair

Senator J. Kalani English, Vice Chair

DATE: Tuesday, February 9, 2010

TIME: 3:00 p.m.

PLACE: Conference Room 225

RE: SB 2670 Fossil Fuel Power Plants

OPPOSE

Aloha Chair Gabbard and Members of the Committee

Life of the Land is Hawai'i's own energy, environmental and community action group advocating for the people and 'aina for 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.

SB 2670 allows a new fossil fuel power plant to be built if it is powered by 49% imported fossil fuel and 51% imported high-climate-impact rainforest biofuels (grown by destroying tropical rainforests and displacing native communities). This is unacceptable.

Life of the Land supports utilizing low climate impact indigenous fuels.

If fuel must be imported, then it should be restricted to being a renewable fuel and/or a waste by-product.

Mahalo,

Henry Curtis
Executive Director

gabbard1 - Carlton

From: mailinglist@capitol.hawaii.gov
Sent: Monday, February 08, 2010 9:40 PM
To: ENETestimony
Cc: mauibrad@hotmail.com
Subject: Testimony for SB2670 on 2/9/2010 3:00:00 PM

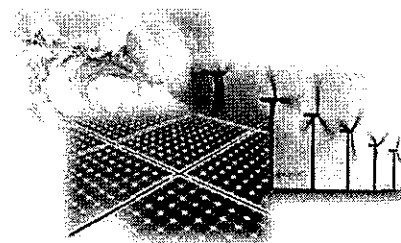
Testimony for ENE 2/9/2010 3:00:00 PM SB2670

Conference room: 225
Testifier position: oppose
Testifier will be present: No
Submitted by: Brad Parsons
Organization: Aloha Analytics
Address:
Phone:
E-mail: mauibrad@hotmail.com
Submitted on: 2/8/2010

Comments:
Aloha Senators,

This bill was introduced by the Governor/Hanabusa. After reviewing this bill we believe it would still allow the same fossil fuel generators to be installed as long as they could burn biofuels. The source of many biofuels in the world is not sustainable, can be destructive to the environment, may compete with food sources, and is likely to still be an expensive source of fuel when petroleum prices rise. We recommend against this bill and do not believe that it presents real solutions.

Mahalo,
Brad Parsons



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 9, 2010, 3:00 P.M.

Room 225

(Testimony is 4 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 2670 & SB 2558, PROPOSED AMENDMENTS

Chair Gabbard and members of the Committee:

The Blue Planet Foundation strongly supports both Senate Bill 2670 and Senate Bill 2558, establishing restrictions on the permitting of new fossil fuel power plants in Hawai'i. We view the measures as an important policy to provide a "backstop" to ensure progress toward Hawai'i's clean energy future. Blue Planet offers some simple amendments to these measures at the end of this testimony.

Overarching rationale for a restriction on new coal and oil power plants

Hawai'i is dangerously dependent on imported fossil fuels to power its economy and way of life. This must change. Fossil fuels are simply not part of Hawai'i's clean energy future. We must draw the line in the sand and make it clear that we will not invest in any more expensive, import-dependent, greenhouse gas-emitting power plants. Hawai'i state policy should reflect our preferred energy future that is powered by clean, indigenous, renewable sources of electricity. Further, a clear prohibition on new fossil fuel power plants of any sort will make Hawai'i the first state in the nation with such a policy a send a clear market signal that we are serious about our clean energy future.

Need for transition to a clean energy future

The transition to clean energy in Hawai'i means a ratcheting down of fossil fuel imports and scaling back existing oil and coal generating units. This measure would ensure that we don't repeat the mistakes of the past. *Rigorous analysis of what it will take to achieve those standards demonstrates that new fossil fuel generating units are not necessary.*

Jeff Mikulina, executive director • jeff@blueplanetfoundation.org

55 Merchant Street 17th Floor • Honolulu, Hawai'i 96813 • 808-954-6142 • blueplanetfoundation.org

The state currently has nearly 2000 megawatts of installed fossil fuel-based electricity generation (providing about 92% of the electricity in the state). While Blue Planet would like to see that number reduced to zero within a decade, the goal of the Hawaii Clean Energy Initiative is to reduce it from 92% dependence to 30% dependence in 20 years (by 2030). That goal is achieved by adding hundreds of megawatts of new renewable energy generation such as wind, solar, wave energy, and others (40% clean energy), while dramatically increasing the end-use efficiency of electricity (30% decrease in electricity usage from forecasted demand in 2030). Those goals—40% clean energy and 30% efficiency—were codified last session through Act 155 (2009).

The Hawaii Clean Energy Initiative (HCEI)—a partnership between the U.S. Department of Energy and the State of Hawai'i—contracted with global energy experts Booz Allen Hamilton to conduct various scenario analyses on how to achieve a 70% clean energy goal by 2030. The results of those analyses demonstrated that none of the trajectories to achieve Hawai'i's clean energy goals required new fossil fuel generating units. The wedge analyses of the different clean energy scenarios are available for your review online at: <http://tiny.cc/lq8yD>

Our transition to a clean energy economy will involve critical decisions about which fossil fuel power plants to retire first—not where to build new power plants.

A prohibition on new fossil fuel generation gives teeth to Hawaii's clean energy laws

Achieving the schedule of clean energy standards means reducing existing fossil generating capacity, not adding to it. As the HCEI analyses revealed, new coal- or oil-based generation *would make achievement of the standards substantially more difficult, as any new fossil fuel-based generation installed in the future will have a useful lifetime of 30 to 50 years or more.*

Therefore, the “no new fossil fuel” policy serves as a backstop and works to prevent backsliding on Hawai'i's clean energy standards. Without a clear prohibition on new fossil fuel generation in place, Hawai'i risks failing to achieve the new clean energy standards. Enforcing compliance with the renewable portfolio standard requirements through penalties and fines is not a desirable outcome (the penalty is currently one-fifth of a penny per kilowatt-hour). Such enforcement risks that the costs from these penalties or fines simply get passed on to consumers or the possibility that such costs jeopardize the utilities' viability. *The fossil fuel prohibition serves as a backstop to ensure that Hawai'i's clean energy transition actually occurs.*

The urgency to enact a “no new fossil fuel” policy this year

There are three primary reasons why it is imperative to quickly move Hawai'i off of coal and oil.

1. The first is energy security. All of Hawaii's fossil fuel is imported, with 100% of coal originating in foreign countries and 97% of Hawaii's oil from non-U.S. sources. In fact, one in four barrels of oil comes from the Middle East. These fossil fuels are finite resources and more developing countries are seeking a greater share of these resources. We have no reason to believe that we will have unlimited access to these resources in the future. Further, by relying on ships bringing oil and coal to Hawai'i, we expose ourselves to disruptions such as the grounding of a large coal ship at Barbers Point on February 5, 2010.
2. Second, oil is expensive. In 2008, Hawai'i spent over \$5 billion on imported oil. This money simply leaves the state without creating any local wealth or jobs. Further, we have no way to predict exactly what the cost will be in a year from now, let alone five or ten years down the road. This is no way to secure the state's economic future.
3. Finally, we know that burning coal and oil releases greenhouse gases that are changing our climate and oceans. Sea level rise could literally change the map of Hawai'i, and ocean acidification from increased carbonic acid in the water could wipe out Hawaii's reefs. State policy must preclude investment in any new power plants that hemorrhage money out of our economy and release climate-changing greenhouse gases into the atmosphere.

Senate Bill 2670 & SB 2558 are compromise versions of "fossil ban"

While Blue Planet and others would support a complete ban on future fossil fuel power plants in Hawai'i, we understand the various concerns by the utility, refineries, and others regarding transitioning to a clean energy economy. We do not necessarily agree with those concerns, but in the interest of enacting an effective policy to clearly move away from fossil fuel power plants, we support the language in SB 2670 and SB 2558. The "compromise" conditions in both bills are as follows:

- New fossil fuel power plants 2 megawatts and smaller may be permitted. This would likely include backup generators for hospitals and black-start units for older fossil facilities.
- New or expanded fossil-based power plants are allowed to be permitted if the utility is currently achieving—and projected to achieve—Hawaii's clean energy standards set forth in Act 155 (2009).

These conditions render this policy more of a "backstop" to the existing renewable portfolio standards (RPS). They reasonably and fairly addresses the main concerns regarding a fossil ban yet still achieve the policy's original purpose of reinforcing compliance with RPS and committing the state to no new coal and oil power plants. The concept is quite simply this: new

coal and oil power plants (or biomass where a majority of the fuel is fossil-based) are permissible only if the electric utility is achieving the RPS.

Senate Bill 2670 further specifies that facilities using a fossil and biomass mix must be powered by greater than 50% biomass (the definition of “biomass fuels” should be specified in this measure—the definition of “biofuels” and the description of “biomass” in §269-91 would work). This same concept is essentially captured in SB 2558 by requiring that the utilities (independently or through power purchase agreements with independent power producers) achieve compliance and maintain compliance with the clean energy standards. If they do, they would be allowed to build a fossil facility with any mix of biofuels.

Proposed amendments

Blue Planet is happy with either version of the measure moving forward. However, if SB 2670 is to be passed out of Committee, we recommend that the reference in Section 2 to a “certificate of public convenience and necessity” (§269-7.5) be removed. We do not believe that it is the appropriate section of law for a fossil fuel power plant restriction. This section refers to companies seeking to enter into Hawaii’s market as a public utility, not those established utilities that wish to build new power plants. Blue Planet prefers the language in SB 2558 which creates a blanket prohibition on all state or county permits for fossil fuel power plants unless certain conditions are met (alternatively, Chapter 196 HRS could be amended with the blanket prohibition language for all state and county permits unless certain conditions are met).

Blue Planet believes that the fossil fuel power plant restrictions proposed by these measures are reasonable and balanced approaches to keeping Hawaii on track to achieving its clean energy standards. This policy, if enacted, will help ensure that all future power in Hawaii is clean power.

Thank you for the opportunity to testify.