SB 2558



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 2558
RELATING TO FOSSIL FUELS

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

The Department of Business, Economic Development, and Tourism (DBEDT) offers comments on SB 2558, which would prohibit the construction of new electrical generating units larger than two megawatts if they generate electricity from fossil fuels. We prefer the Administration measure, SB 2670.

The provisions of SB 2558 could be construed to mean that units which are capable of using any amount of fossil fuel would not be allowed. This could have unintended consequences and limit the flexibility needed to meet the objectives of Hawaii's renewable portfolio standards.

We strongly prefer the Administration measure, SB 2670, which recognizes that:

- modern power generation equipment can be capable of burning biofuels as well as fossil fuels;
- we need to have some flexibility in order to maintain reliable electric utility
 service as our nascent in-state biofuel industry is established and expands; and

 allowing flexible-fueled power plants would be a judicious measure during the transition to clean energy.

Therefore, we suggest that new power plants which are capable of burning both fossil and biofuels be allowed, as long as less than half of the energy is derived from fossil fuel, as stipulated in SB 2670.

Restricting the construction of new fossil fuel power plants is a definitive step toward achieving the aims of Hawaii'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.

The goal is clear, as already set forth in statute. However, transforming Hawaii's electricity systems and improving their security, resilience, and reliability while they are running 24 hours per day will require the flexibility to adopt new technologies. For this reason, we strongly recommend the approach proposed in SB 2670.

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 2558 - 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 2558 restricts any new construction of or expansion of existing fossil-fueled, electricity-generating facilities unless the electric utility company can demonstrate compliance with the renewable energy portfolio standards.

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.

We believe that this bill in general is overly restrictive. By simply referring to generators fired on fossil fuel, it prohibits generators that would be run on blends of fossil and biofuel or biomass, which may be required due to technical limitations of generators or even in the event the supply of biofuels is not available or is interrupted. This lack of flexibility could result in serious reliability problems for our customers.

Similarly, the bill would also prevent the HECO companies from entering into a new contract with an Independent Power Producer (IPP) that would run on blends of fossil and biofuel or biomass, which may be required due to technical limitations of generators or even in the event the supply of biofuels is not available or is interrupted. 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.



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SB 2558 RELATING TO FOSSIL FUELS

PAUL T. OSHIRO MANAGER – GOVERNMENT RELATIONS ALEXANDER & BALDWIN, INC.

FEBRUARY 9, 2010

Chair Gabbard and Members of the Senate Committee on Energy & Environment:

I am Paul Oshiro, testifying on behalf of Alexander & Baldwin, Inc. (A&B) and its agricultural company Hawaiian Commercial & Sugar Company on SB 2558, "A BILL FOR AN ACT RELATING TO FOSSIL FUELS."

Hawaiian Commercial & Sugar Company (HC&S) has been in operation for over 125 years. While Hawaii's many other sugar companies have shut down over the years, HC&S has been fortunate, through significant investments in our agricultural infrastructure and operations and the implementation of our diversified bio-production program, to have sustained our operations and continue as a major employer in the State of Hawaii. Despite a current uptick in sugar prices, history has proven that commodity sugar prices will remain relatively flat, as they have over the last few decades, despite increasing production costs. Thus, HC&S has for a number of years been pursuing, and investing in, a transition from a primary producer of commodity sugar to the production of specialty sugar and bio-based products. In addition to being the main supplier of Sugar In The Raw, the little brown packets of sugar seen at restaurants and coffee shops across the nation, HC&S is also expanding production and sales of our specialty Maui Brand Sugar.

HC&S also generates biomass produced electricity for its sugar milling, irrigation pumping, and other internal operations and provides electricity to Maui Electric Company (MECO) for general community use. The source of fuel for this biomass electricity is bagasse, the residual fiber of the sugar cane plant. Not only does HC&S provide approximately 6% of MECO's total electricity, HC&S is a firm power source to MECO (i.e. committed power delivery, not on an 'as available' basis), and has played a significant role in the restoration of MECO's electrical service during power outages.

This bill prohibits the development of new facilities and the modification of existing facilities with a rated capacity of more than two megawatts that generate electricity from fossil fuel sources. While HC&S's biomass power generating facilities are fueled primarily by sugar cane bagasse, there is a need for these generating facilities to periodically burn an amount of fossil fuel to maintain stable boiler operations (biomass fuel quality can vary depending on harvesting and mill operations), to remain in compliance with air emission regulations, and to meet firm power commitments to MECO, particularly during the off season maintenance period when bagasse is not available. We respectfully request your consideration to incorporate amendments into this bill to ensure that facilities that do not utilize fossil fuels as its primary source of fuel for the generation of electricity are excluded from the scope of this bill. We have attached amended language for your consideration.

"§269- Fossil-fueled, electricity-generating facility; restrictions. (a)
Beginning on July 1, 2010, no state or county agency shall permit:

⁽¹⁾ The construction of a new electricity-generating facility that generates electricity primarily from fossil-fuel, where the electrical output rating of the new equipment exceeds 2.0 megawatts; or

⁽²⁾ An expansion in generating capacity of an existing, electricity-generating facility that generates electricity primarily from fossil fuel, where the incremental electrical output rating of the new equipment exceeds 2.0 megawatts,

unless the applicant is an electric utility company and the utility demonstrates present compliance with, and a reasonable projection for future compliance with, part V of this chapter.

(b) No electric utility company shall enter into an agreement for the purchase of electricity from an electricity-generating facility that generates electricity primarily from fossil-fuel built after December 31, 2010, unless the utility demonstrates present compliance with, and a reasonable projection for future compliance with, part V of this chapter."

Your consideration to incorporate the above mentioned amendments into this bill is sincerely appreciated. Thank you for the opportunity to testify.



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT February 9, 2010, 3:00 P.M.

(Testimony is 1 page long)

TESTIMONY IN STRONG SUPPORT OF SB 2558

Aloha Chair Gabbard and Members of the Committee:

The Hawai'i Chapter of the Sierra Club and its members strongly support SB 2558 which would ban the building of any new, larger (over 2MW) electrical generation facilities that would produce energy from the combustion of any type of fossil fuel.

Hawai'i imports 50 million barrels of oil annually -- 80% of which comes from foreign sources. In addition, over 805,000 tons of coal is imported annually and together these two sources amount to 92% of energy generation in Hawai'i. Our heavy reliance on fossil fuels leaves Hawai'i vulnerable to the fluctuation of global markets beyond our control. In the summer of 2008, we saw prices skyrocket to \$140 a barrel and thus billions of dollars went overseas to other countries and our island community suffered as energy prices went up.

Furthermore, our current fossil fuel consumption contributes over 23 million tons of greenhouse gases to our atmosphere annually. There is now indisputable scientific evidence that carbon gases trap the suns heat and is gradually raising the temperature of our planet leading to the melting of the polar ice caps and a subsequent rise in sea levels - something extremely worrisome for our island community. This will not only eliminate large tracts of coastal land but also further hurt our tourism-based economy as our beaches and a num s will be submerged.

The passage more financia these

Mahalo for the testing

g step towards committing to a cleaner and children and their children.

gabbard1 - Carlton

From:

mailinglist@capitol.hawaii.gov

Sent:

Monday, February 08, 2010 9:44 PM

To:

ENETestimony

Cc:

mauibrad@hotmail.com

Subject:

Testimony for SB2558 on 2/9/2010 3:00:00 PM

Testimony for ENE 2/9/2010 3:00:00 PM SB2558

Conference room: 225

Testifier position: comments only Testifier will be present: No Submitted by: Brad Parsons Organization: Aloha Analytics

Address: Phone:

E-mail: <u>mauibrad@hotmail.com</u>

Submitted on: 2/8/2010

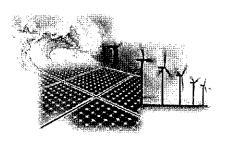
Comments:

Aloha Senators,

This bill was introduced by GABBARD, HEMMINGS, HOOSER, et.al. This bill is slightly better than SB 2670 in that it would not allow new fossil fuel generators of greater than 2MW unless a utility demonstrates present compliance with, and a reasonable projection for future compliance with renewable energy portfolio standards (REPS). The problem is " projection of future compliance with REPS" leaves a lot of room for a utility to go ahead and install a new fossil fuel generator counter to unrealized future promises toward renewable energy generation. It's a slightly better bill than the Governor's, but not by much. This bill might be better if only present compliance (with the standards enumerated) and not future compliance with REPS were allowed as the exception for a new fossil fuel generator. This bill has potential with amendments to address the problem, but as written it is not a problem solver.

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 Hawaii'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 Hawaii'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.

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 Hawaii'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 Hawaii'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 Hawaii'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 Hawaiii, and ocean acidification from increased carbonic acid in the water could wipe out Hawaiiis 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.