# SB 188

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
INTERIM DIRECTOR

# DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of
**RICHARD C. LIM**
**Director**
Department of Business, Economic Development, and Tourism
before the
**SENATE COMMITTEE ON**
**ENERGY AND ENVIRONMENT**
February 1, 2011
3:30 p.m.
State Capitol, Conference Room 225

in consideration of
**SB188**
**RELATING TO FOSSIL FUELS**

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

The Department of Business, Economic Development, and Tourism (DBEDT) supports the intent of SB 188, which would restrict the construction of new fossil fuel electricity generating facilities as well as the expansion of an existing facility that generates electricity from fossil fuel, where the incremental electrical output of the new equipment exceeds 2 megawatts.

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 weare 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.

Recognizing that modern power generation equipment can be capable of burning biofuels as well as fossil fuels, and also that 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, we suggest that allowing flexible-fueled power plants would be a judicious measure during the transition to clean energy. 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.

Thank you for the opportunity to offer these comments.

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

**FEBRUARY 1, 2011**

**MEASURE: S.B. No. 188**
**TITLE: Relating to Fossil Fuels.**

Chair Gabbard and Members of the Committee:

**DESCRIPTION:**

This bill 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; exempts any retrofit or replacement for the purposes of improved efficiency or to lower greenhouse gas emissions; provides exemption if an emergency is declared.

**POSITION:**

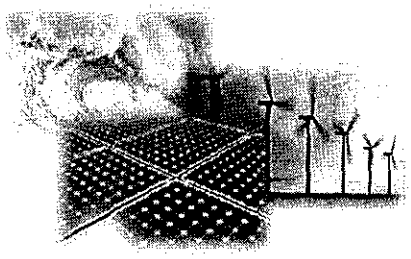
The Public Utilities Commission ("Commission") supports this bill.

**COMMENTS:**

The Commission supports restricting new utility fossil fuel generation to emergency situations or to when a utility is in compliance with its renewable portfolio standards and projected to be in future compliance.

Thank you for the opportunity to testify.

blue planet FOUNDATION



**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT**
February 1, 2011, 3:30 P.M.
Room 225
**(Testimony is 4 pages long)**

**TESTIMONY IN STRONG SUPPORT OF SB 188**

Chair Gabbard and members of the Committee:

The Blue Planet Foundation strongly supports SB 188, a measure establishing restrictions on the permitting of new fossil fuel power plants in Hawai'i. We view this measure as an important policy to provide a "backstop" to ensure progress toward Hawaii's clean energy future.

*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.*

**Jeff Mikulina, executive director • jeff@blueplanetfoundation.org**
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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 in 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. 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*

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 188 is a compromise version 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 S B 188. 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).

- Fossil fuel facility improvements to increase efficiency or decrease greenhouse gas emissions are permitted.

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.

Blue Planet believes that the fossil fuel power plant restrictions proposed in SB 188 is a reasonable and balanced approach to keeping Hawai'i on track to achieving its clean energy standards. This policy, if enacted, will help ensure that all future power in Hawai'i is clean power.

Thank you for the opportunity to testify.

# Sierra Club
## Hawai'i Chapter
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**SENATE COMMITTEE ON ENERGY AND ENVIRONMENT**

February 1, 2011, 3:30 P.M.
**(Testimony is 1 page long)**

**TESTIMONY IN SUPPORT OF SB 188**

Chair Gabbard and members of the Committee:

The Sierra Club, Hawaii Chapter, with 5500 dues paying members statewide, strongly supports SB 188, banning the addition or expansion of any new fossil fuel burning facilities for electricity generation unless the utility is in compliance with the renewable portfolio standard. This historic bill will be praised for years to come. Hawaii's state policy must reflect our preferred choice of clean, indigenous, renewable sources of electricity.

SB 188 is a smart addition to Hawaii's renewable portfolio standard and ensures long-term compliance. This measure also makes economic sense and furthers Hawaii's long-term stability. 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 sources. In addition, over 805,000 tons of coal are imported into our state. 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 annually.

Hawaii's economic, environmental, and energy security demand that we reduce the amount of fossil fuel imported and consumed in Hawaii. This bill is a solid step in that direction.

Mahalo for the opportunity to testify.

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

**Catherine P. Awakuni**
**Manager, Corporate Planning**
**Hawaiian Electric Company, Inc.**

**Tuesday, February 1, 2011**
**3:30 pm**
**on SB 188 – Relating to Fossil Fuels**

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

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

SB 188 prohibits the permitting of 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.

## gabbard1 - Carlton

**From:** mailinglist@capitol.hawaii.gov
**Sent:** Monday, January 31, 2011 11:45 AM
**To:** ENETestimony
**Cc:** marcia.wright@heco.com
**Subject:** Testimony for SB188 on 2/1/2011 3:30:00 PM

Testimony for ENE 2/1/2011 3:30:00 PM SB188

Conference room: 225
Testifier position: oppose
Testifier will be present: Yes
Submitted by: Cecily Barnes
Organization: Hawaiian Electric Company
Address:
Phone:
E-mail: marcia.wright@heco.com
Submitted on: 1/31/2011

Comments:

**SENATE COMMITTEE ON**
**ENERGY AND ENVIRONMENT**

February 1, 2011

Senate Bill 188 Relating to Fossil Fuels

Chair Gabbard and members of the Senate Committee on Energy and Environment, I am Rick Tsujimura, representing AES Hawaii, Inc. AES Hawaii OPPOSES SB 188 Relating to Fossil Fuels as drafted.

AES Hawaii is currently pursuing the possibility of burning biomass from the Big Island in its facility to produce approximately 5 megawatts of power. The language of this measure as written would prohibit our expansion of the facility to burn the biomass. The biomass is a eucalyptus product from the Hamakua coast which will be shipped to Honolulu, and burned in AES Hawaii's current facility.

We believe this is a project which deserves consideration as your committee deliberates on this measure. Consequently, we are requesting amendments to the measure, to allow AES Hawaii to continue with its plan to burn biomass at our Kalaeloa plant.

Specifically, we are requesting the following:

Page 1, line 10, deleting "2.0" and inserting "5.0".

Page 1, line 11, inserting the words "fossil fuel" between the words "An expansion in" and "generating capacity".

Page 1, line 13, deleting the words "from fossil fuel".

Page 1, line 15, deleting the "2.0" and substituting "5.0".

Page 2, line 2, deleting the word "an" and inserting the words "a fossil fuel generated".

Page 2, lines 3-4, deleting the phrase "that generates electricity from fossil fuel."

Page 2, line 8 insert the phrase "fossil fuel" after the word "existing"

Thank you for the opportunity to present this testimony.

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**SB 188**
**RELATING TO FOSSIL FUELS**

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

**FEBRUARY 1, 2011**

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 188, "A BILL FOR AN ACT RELATING TO FOSSIL FUELS."

Hawaiian Commercial & Sugar Company (HC&S) has been in operation for over 125 years and is Hawaii's last remaining sugar plantation. HC&S has approximately 34,000 acres in active cultivation and employs about 800 residents. 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 up tick 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. In addition, HC&S is currently participating in significant new Hawaii-based research initiatives on biofuels, closely working with the University of Hawaii and various Federal agencies on energy crop development, energy conversion technologies, and long term resource requirements for biomass production. HC&S also provides water (through the County) to approximately 35,000 Upcountry Maui Residents and to the Kula Agricultural Park.

This bill prohibits the construction of new facilities and the expansion 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. In that this bill would prohibit the expansion of HC&S's present renewable energy facilities, we respectfully request your consideration to incorporate amendments into this bill to exclude facilities that utilize biomass as its primary source of fuel for the generation of electricity.

Thank you for the opportunity to testify.