

TESTIMONY OF HERMINA MORITA  
CHAIR, PUBLIC UTILITIES COMMISSION  
DEPARTMENT OF BUDGET AND FINANCE  
STATE OF HAWAII  
TO THE  
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION  
JANUARY 31, 2012

**MEASURE:** H.B. No. 2041

**TITLE:** Relating to Electricity

Chair Coffman and Members of the Committee:

**DESCRIPTION:**

This measure will prohibit any electric utility from curtailing the energy received from an independent power producer or preventing the sale of energy to anyone other than to the utility.

**POSITION:**

The Commission opposes this measure. An attempt to try to resolve this engineering and cost issue through legislation may have a negative impact on the electrical grid system and the Hawaii ratepayer. The Commission would like to offer the following comments for the Committee's serious consideration.

**COMMENTS:**

The Commission understands that curtailment of renewable energy impacts the development of renewable projects, not only in Hawaii, but across the country. To address this problem, the Commission has tasked the electric utilities, independent power producers, and other stakeholders to come up with technical solutions to resolve this issue in the Reliability Standards Working Group docket that is currently underway. Curtailment issues need to be solved with engineering solutions rather than through legislative mandates in power purchase agreements.

Curtailment of renewable energy occurs for two primary reasons: 1) lack of available transmission during a particular time to incorporate some or all of the energy produced, or 2) excess generation at times of minimum or low load. Currently, independent power producers are curtailed according to a pre-determined priority that was established at the time of the contract agreement. For example, prior to curtailment for excess energy, Hawaii Electric Light Company ("HELCO") and Maui Electric Company, Ltd. ("MECO") will reduce output of the must-run generation to minimum levels, taking into consideration regulating reserve requirements for system reliability. Intermediate units are then taken off-line, with consideration given for load demand changes, observed variability of output, and the minimum down time for bringing these intermediate units back on-line. This is the primary cause of the majority of curtailments of energy on the HELCO and MECO systems.

Rate payers would experience rate increases and lower system reliability if electric utilities were prevented from curtailing independent power producers at times of low demand on the system. For instance, if HELCO and MECO were required to pay for the energy not taken from their independent power producers due to low load conditions, their respective rate payers would have higher bills based on the additional cost of paying for power they did not use. Furthermore, if HELCO were required to shut off its generating units to accept more power from independent power producers such as Tawhiri Wind or Puna Geothermal Venture, HELCO rate payers would not see a savings because those contracts are based on the avoided cost of oil. Finally, HELCO and MECO customers would experience system reliability issues if HELCO and MECO shut off firm generating units to accept more intermittent wind onto the grid at times of low load conditions.

Allowing an independent power producer to sell the power to someone other than the utility does not make the problem of curtailment go away. It only makes the problem worse. Again, curtailment occurs in low load situations. By selling to someone other than the utility in that situation in effect lowers the system load even more, which could result in the utility shutting down more firm generation. If the intermittent resource does not meet the needs of the customer who switched out, when the customer comes back to the grid there may not be enough generation available to meet the customer's demand. This could result in an under-generation situation that will impact system reliability for all of the customers on the grid.

Thank you for the opportunity to testify on this measure.

**Testimony before the  
House Committee on  
Energy and Environmental Protection**

**H.B. 2041 -- Relating to Electricity**

**Tuesday, January 31, 2012  
8:15 am, Conference Room 325**

**By Barry Nakamoto  
Manager, Renewable Acquisition  
Hawaiian Electric Company, Inc.**

Chair Coffman, Vice-Chair Kawakami and Members of the Committee:

My name is Barry Nakamoto. I am the Manager of the Renewable Acquisition Department at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric Company (HECO) and its subsidiary utilities, Maui Electric Company (MECO) and Hawaii Electric Light Company (HELCO).

Hawaiian Electric does not support H.B. 2041 on the basis that restricting the electric utility's ability to curtail energy from independent power producers, regardless of whether they are fossil or non-fossil fueled, could have serious adverse consequences for the safety and reliability of the electric grid.

Unlike the mainland, Hawaii is not interconnected to adjacent grids. This requires the utility to maintain the ability to curtail excess electrical energy output during periods where the supply of electrical generating facilities, regardless of fuel type or ownership, exceeds the demand for electricity by our customers. Taking away the utility's ability to manage the delicate balance of supply and demand will have adverse impacts to reliability and grid stability.

In addition, the utility must have the ability to curtail energy output from generating facilities during periods required for maintenance and safety. For example, if a transmission line that

interconnects a generation facility requires maintenance, the utility requires the ability to ensure that no electrical energy is being supplied to the line that is scheduled for maintenance.

With respect to the reasonableness of the terms and conditions in the power purchase agreements between the electric utility and independent power producers, Hawaiian Electric strongly supports that the Public Utilities Commission is the proper entity authorized to review and approve or disapprove any such provisions in these agreements relating to curtailment of energy. Hawaiian Electric also notes that the power purchase agreements negotiated between the Company and Independent Power Producers have specific conditions, and not a unilateral right, upon which the Company can exercise its rights to curtail energy.

Further, allowing independent power producers to sell electricity directly to purchasers other than the utility for the purposes of eliminating curtailment of energy could have adverse impacts to the reliable operation of the grid and would actually result in exacerbating the low load conditions by further removing load demand from the grid. In addition, the sale of electricity directly to a purchaser other than the utility via the utility's grid amounts to "wheeling".

The concept of wheeling electricity presents many complex and challenging issues. The Public Utilities Commission has already opened a docket to consider Intra-Governmental Wheeling of electricity (Docket No. 2007-0176). The purpose of the docket is to allow for a thorough analysis and review of those complexities and challenges that must be considered while ensuring that they do not adversely affect the electric utility's obligation to serve and the reliability of the electric system as a whole. That docket is ongoing and will continue its efforts in coordination with the work of the Public Utility Commission's much broader Reliability Standards Working Group (Docket No. 2011-0206) proceeding.

Thank you for the opportunity to testify.



TESTIMONY OF TAWHIRI POWER LLC ON HB 2041  
BEFORE THE HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL  
PROTECTION: TUESDAY, JANUARY 31, 2012 AT 8:15 a.m.

TO THE HONORABLE CHAIR COFFMAN AND MEMBERS OF THE COMMITTEE:

Tawhiri Power LLC ("TPL") is an Independent Power Producer ("IPP") that owns and operates the Pakini Nui Wind Farm located in the South Point Area on the Island of Hawaii. The Pakini Nui plant generates renewable energy that is sold to the Hawaii Electric Light Company, Inc. ("HELCO") pursuant to a Power Purchase Agreement ("PPA").

TPL applauds HB2041 because it describes the situation which TPL has been experiencing. Specifically, TPL is a nonfossil fuel generator that is being curtailed by HELCO and its PPA prohibits it to sell any energy that HELCO curtails to a third party. As HB2041 describes this results in great financial detrimental to TPL and is counter to the State's policy to promote the use of renewable energy.

However, it is important to note, that the objective of this bill will only be reached if the proposed language is applied to all PPAs, both existing and future. To not apply the prohibition of a curtailment provision to existing PPAs would place nonfossil fuel generators, like TPL, who currently have a PPA with the Utility at a greater disadvantage. Specifically, it would result in even more curtailment. And, TPL would continue to be prohibited to sell its energy to a third party.

Thus, TPL supposes the passage of HB2041 only if it will apply to both existing and future PPAs.

Thank you for the opportunity to testify.

**kawakami1 - Marissa**

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Sunday, January 29, 2012 5:37 PM  
**To:** EEPtestimony  
**Cc:** skaye@runbox.com  
**Subject:** Testimony for HB2041 on 1/31/2012 8:15:00 AM  
**Attachments:** HB2041testimony.docx

Testimony for EEP 1/31/2012 8:15:00 AM HB2041

Conference room: 325  
Testifier position: Comments Only  
Testifier will be present: No  
Submitted by: sally kaye  
Organization: Individual  
E-mail: [skaye@runbox.com](mailto:skaye@runbox.com)  
Submitted on: 1/29/2012

Comments:

**HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION**

Attention: Denny Coffman, Chair  
Comments on HB 2041, Relating To Curtailment  
Hearing January 31, 2012, 8:15 a.m.

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Aloha kakou:

I am writing to comment on HB 2041.

Moving at a steady pace to increase the use of renewable energy, while maximizing conservation measures, should be the goal of each house, each neighborhood and each island, along with the state as a whole.

- Prohibiting curtailment of firm geothermal-based power makes sense, since it reduces the use of fossil-fuels and constitutes a "like for like" power usage.
- Prohibiting curtailment of intermittent renewable energy, however, is problematic, in that it may act to artificially increase profitability for resource providers when the resource itself cannot be used by the grid due to times of decreased demand. The impact on ratepayers cannot be positive.
- There is currently an open PUC docket (2007-0176) investigating "wheeling" between intra-governmental agencies, it is unclear whether this measure would preempt that work.
- Without stringent guidelines, prohibiting curtailment of intermittent resources while permitting unidentified "sales" of excess intermittent energy to "purchasers other than the electric utility" could present reliability issues.

Mahalo for considering these comments.

**kawakami1 - Marissa**

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Monday, January 30, 2012 6:26 AM  
**To:** EEPtestimony  
**Cc:** rkaye@mdi.net  
**Subject:** Testimony for HB2041 on 1/31/2012 8:15:00 AM

Testimony for EEP 1/31/2012 8:15:00 AM HB2041

Conference room: 325  
Testifier position: Comments Only  
Testifier will be present: No  
Submitted by: Robin Kaye  
Organization: Individual  
E-mail: [rkaye@mdi.net](mailto:rkaye@mdi.net)  
Submitted on: 1/30/2012

**Comments:**

Aloha:

I am writing to comment on HB 2041.

I am strongly in favor of all Hawaii residents and businesses moving at a steady pace to increase the use of renewable energy, while maximizing conservation measures.

Each residence, each neighborhood and each island, along with the state as a whole, should adopt those goals.

HB2041 is on the right track in prohibiting curtailment of firm geothermal-based power, since it replaces the use of fossil-fuels.

Prohibiting curtailment of intermittent renewable energy, however, is problematic, in that it will, at great cost to the ratepayers, increase profitability for resource providers when the resource itself cannot be used by the grid due to times of decreased demand.

HB2041 may, given the currently-open PUC docket (2007-0176) investigating "wheeling" between intra-governmental agencies, preempt that work. We should let the PUC complete its work on this issue first.

What would be the impact of this bill on reliability issues? Without careful guidelines, prohibiting curtailment of intermittent resources could present significant reliability challenges.

Mahalo for considering these comments.