

SB 2949

RELATING TO ENERGY



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TO THE SENATE COMMITTEE ON TRANSPORTATION AND ENERGY

THE TWENTY-EIGHTH LEGISLATURE  
REGULAR SESSION OF 2016

WEDNESDAY, FEBRUARY 17, 2016  
2:45 P.M.

TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF  
CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER  
AFFAIRS, TO THE HONORABLE LORRAINE R. INOUE, CHAIR,  
AND MEMBERS OF THE COMMITTEE

SENATE BILL NO. 2949 - RELATING TO ENERGY

DESCRIPTION:

This measure proposes to prohibit the Public Utilities Commission ("PUC") from approving power purchase agreements that prohibit the sale of energy to third parties or agreements that require utility consent to sell energy to third parties.

POSITION:

The Division of Consumer Advocacy ("Consumer Advocate") offers comments on this bill.

COMMENTS:

The purpose of this bill is to allow independent power producers ("IPP") to sell curtailed energy to third parties. If the electric utility is curtailing energy, then it means that supply exceeds load and the energy that is being curtailed cannot be accepted on the grid. In order for an IPP to sell that curtailed energy to a third party, it would require islanding the generator and the third party, because if either remained connected to the grid, then the curtailed energy will still be put onto the grid, which is exactly what was being prevented in the first place.

Moreover, if the IPP and the third party were not islanded, then an IPP selling energy to a third party would be wheeling, i.e., the use of the utility's transmission and distribution system for the sale of electricity to a third party. Wheeling should be allowed only after careful consideration by the PUC with input from the various stakeholders. Furthermore, reasonable tariff rates would need to be adopted by the PUC to compensate the utility for the use of its transmission lines, and utility system operators would need some authority to maintain power quality on the grid.

Thank you for this opportunity to testify.

**TESTIMONY BEFORE THE SENATE COMMITTEE ON  
TRANSPORTATION AND ENERGY**

**S.B. 2949**

**Relating to Energy**

Wednesday, February 17, 2016

2:45 pm

State Capitol, Conference Room 225

Kevin M. Katsura

Assistant Deputy General Counsel (Regulatory), Legal Department  
Hawaiian Electric Company, Inc.

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

My name is Kevin Katsura and I am testifying on behalf of Hawaiian Electric Company and its subsidiary utilities Maui Electric Company and Hawai'i Electric Light Company in **opposition** to S.B. 2949.

This bill would prohibit the Hawaii Public Utilities Commission ("PUC") from approving any power purchase agreement ("PPA") which does not allow the sale of energy to third parties or which requires utility consent before selling energy to third parties. Consequently, certain PPAs that are negotiated at arms-length, and determined to be cost effective, reasonable and in the interests of all customers could not be approved. This would include any necessary amendments to, modifications, or renewal of PPAs critical to utility operations, unless the PPA allows for sales of energy to undefined "third parties" regardless of size, number or location.

One of the stated reasons for this bill is that allowing the unrestricted and unregulated sale of energy to third parties would reduce the curtailment of energy which sometimes occurs during excess energy conditions as a result of the need to constantly and consistently balance generation and load on the utility system. This is simply not the case. If there is too much energy on the system, and not enough load to absorb it, this amount of excess energy produced by the generation must be

curtailed. This is true regardless of who is producing the energy and who is consuming it.

To be clear, this is a retail wheeling bill. The Hawaiian Electric Companies oppose this bill because it is not beneficial to all consumers of energy in Hawaii, and is not in the public interest.

Specifically, this bill would likely benefit a few large-load customers, at the expense of non-wheeling customers who would be left paying for the costs of the current electrical infrastructure. Wheeling, as proposed, would also create winners and losers between energy providers – including those who currently have PPAs achieved through competitive bidding and the Companies' other renewable energy procurement processes such as the Feed-In Tariff program - and those who will be allowed to sell directly to third parties.

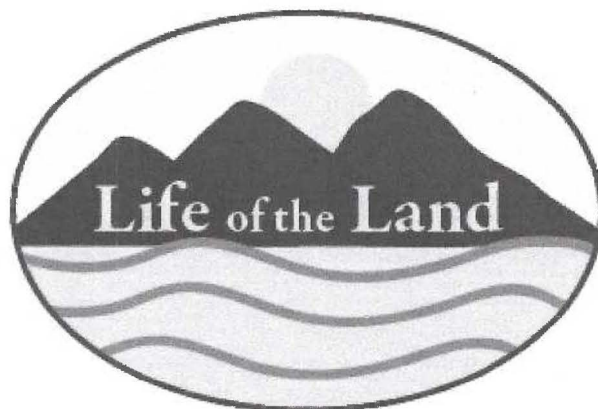
Wheeling could also make prices more inefficient, cause uneconomic bypass, reduce service reliability to core customers, and require additional costs to maintain the integrity and stability of the system.

Further, wheeling may result in the degradation of service reliability. The utility will be unable to predict where the load will come on to the system and ensure that the transmission and other infrastructure are adequate to safely support such transactions. Under this bill, the ability of the utility to negotiate operational requirements and project design to protect the system would also be degraded.

Accordingly, the Hawaiian Electric Companies oppose S.B. 2949.

Thank you for this opportunity to testify.





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COMMITTEE ON TRANSPORTATION AND ENERGY

Senator Lorraine R. Inouye, Chair  
Senator Mike Gabbard, Vice Chair

DATE: Wednesday, February 17, 2016

TIME: 2:45 p.m.

PLACE: Conference Room 225

Re: SB 2949 Relating to Energy

**Support**

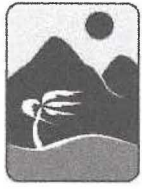
Aloha Chair Inouye, Vice Chair Gabbard, and Member of the Committees

Life of the Land is Hawai'i's own energy, environmental and community action group advocating for the people and `aina for 46 years. 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.

Hickam Air Force Base has experimented with solar and wind on the same distribution feeder. When production exceeded electricity need, the electricity was used to make hydrogen which can power vehicles. Independent Power Producers don't have this luxury. Even when their excess power is being curtailed they are forbidden to use their output for third party operations.

The restrictions in power purchase agreements lead to instability. Imagine instead if wind and solar producers over produced electricity and the fluctuations above the needs of the utility were siphoned off for hydrogen production. Wind and solar would start to resemble baseload energy. Everyone would gain.

Mahalo, Henry Curtis, Executive Director



COLLEGE OF SOCIAL SCIENCES

# HAWAII ENERGY POLICY FORUM

UNIVERSITY OF HAWAII 'I AT MĀNOA

## Hawaii Energy Policy Forum

Jeanne Schultz Afuvai, Hawaii Inst. for Public Affairs  
Karlle Asato, Hawaii Government Employees Assn  
Joseph Boivin, Hawaii Gas  
Warren Bollmeier, Hawaii Renewable Energy Alliance  
Michael Brittain, IBEW, Local Union 1260  
Albert Chee, Chevron  
Elizabeth Cole, The Kohala Center  
Kyle Datta, Ulupono Initiative  
Mitch Ewan, UH Hawaii Natural Energy Institute  
Jay Fidell, ThinkTech Hawaii  
Carl Freedman, Haiku Design & Analysis  
Matthias Fripp, REIS at University of Hawaii  
Ford Fuchigami, Hawaii Dept of Transportation  
Mark Glick, Hawaii State Energy Office, DBEDT  
Justin Gruenstein, City & County of Honolulu  
Dale Hahn, Ofc of US Senator Brian Schatz  
Michael Hammett, SSRI at University of Hawaii  
Senator Lorraine Inouye, Hawaii State Legislature  
Randy Iwase, Public Utilities Commission  
Ashley Kaono, Ofc of US Representative Tulsi Gabbard  
Jim Kelly, Kauai Island Utility Cooperative  
Darren Kimura, Energy Industries  
Kelly King, Sustainable Biodiesel Alliance  
Kal Kobayashi, Maui County Energy Office  
Representative Chris Lee, Hawaii State Legislature  
Gladys Marrone, Building Industry Assn of Hawaii  
Stephen Meder, UH Facilities and Planning  
Hermína Morita, Energy Dynamics  
Sharon Moriwaki, UH Public Policy Center  
Tim O'Connell, US Dept of Agriculture  
Jeffrey Ono, Division of Consumer Advocacy, DCCA  
Stan Osserman, HCAIT  
Darren Pai, Hawaiian Electric Companies  
Melissa Pavlicek, Hawaii Public Policy Advocates  
Randy Perreira, Hawaii Government Employees Assn  
Rick Reed, Hawaii Solar Energy Assn  
Cynthia Rezentes, Ofc of US Representative Mark Takai  
Rick Rocheleau, UH Hawaii Natural Energy Institute  
Will Rolston, Hawaii County, Research & Development  
Riley Saito, SunPower Systems  
Scott Seu, Hawaiian Electric Companies  
Joelle Simonpietri, US Pacific Command Energy Ofc  
H. Ray Starling, Hawaii Energy  
Ben Sullivan, Kauai County  
Lance Tanaka, Par Hawaii, Inc.  
Maria Tome, Public Utilities Commission  
Alan Yamamoto, Ofc of US Senator Mazie Hirono

## Testimony of the Hawaii Energy Policy Forum Before the

Senate Committee on Transportation and Energy  
February 17, 2016 at 2:45pm in Conference Room 225

### COMMENTS on SB 2949 Relating to Energy

Chair Inouye, Vice-Chair Gabbard, and Members of the Committee,

The Hawaii Energy Policy Forum (“HEPF”), created in 2002, is comprised of over 40 representatives from Hawaii’s electric utilities, oil and natural gas suppliers, environmental and community groups, renewable energy industry, and federal, state and local government, including representatives from the neighbor islands. Our vision, mission and comprehensive “10 Point Action Plan” guide us in moving Hawaii toward its preferred energy goals. It is for that reason that the HEPF provides comments on SB 2949. It takes no position on the concept of retail wheeling and offers it comments on this measure seeking to avoid unintended consequences.

This bill appears to be a vehicle to support the concept of retail wheeling. It is premature because a prerequisite to retail wheeling is the need to “unbundle” the electricity market. The unbundling of the infrastructure and services by the traditional vertically integrated electric utility typically aims to provide the access of all players to distribution and transmission systems without discrimination and the prevention of cross subsidization between undertakings conducting generation, transmission, distribution and retail sales activities. Retail wheeling represents only one small piece of the larger puzzle of an evolving utility of the future. Retail wheeling cannot be looked at in isolation given its impact on the Hawaii electric system and our isolated island grids and small customer base. These are issues that the Public Utilities Commission (“PUC”) is well aware of and has incorporated into its on-going investigations and its inclinations.

Secondly, inadvertent consequences may occur when the Legislature, by statute, impedes the PUC’s ability to thoroughly examine the economic, financial and technical viability of power purchase agreements. It is the electricity ratepayer/customer that bears the cost of power purchases. A bill such as this may inadvertently increase costs to ratepayer/customer if the PUC cannot deny or approve with conditions, based on its findings, a power purchase agreement because of statutory restrictions.

Thank you for the opportunity to testify.

*This testimony reflects the position of the Forum as a whole and not necessarily of the individual Forum members or their companies.*





**SENATE COMMITTEE ON TRANSPORTATION AND ENERGY**

February 17, 2016, 2:45 P.M.

Room 225

(Testimony is 2 pages long)

**TESTIMONY IN STRONG SUPPORT OF SB 2949**

Aloha Chair Inouye, Vice Chair Gabbard, and Committee members,

The Blue Planet Foundation supports SB 2949, which establishes a policy that will clear the path for innovation in storing renewable energy, with strategies such as clean hydrogen production.

It is important to note that **this bill creates a mechanism to use and store energy that would otherwise be wasted** (“curtailed”). This bill does not allow renewable energy projects to use utility power lines to sell energy to utility customers. The bill does not reduce the utility’s ability to control the interconnection of renewable energy projects.

“Curtailed” energy is energy produced by an independent power producer, but which is not accepted by the utility onto the electric grid. The energy is typically wasted. Because the cost of renewable energy is often fixed, renewable energy developers must raise the price of energy sold to the electric utility to account for this risk that some generation will be wasted. The cost of that wasted energy is passed onto consumers.

A more optimal approach would be to find ways to store that energy for later use, or convert it from electricity into another form of energy (e.g. generating hydrogen from water). Existing power purchase agreements typically restrict the use of curtailed energy. For example, the HECO Companies’ standard power purchase agreement (“PPA”) states: “[Renewable energy projects] shall not sell energy from the Facility to any Third Party.”<sup>1</sup> This eliminates or reduces any incentive to find innovative ways to use or store curtailed energy.

We support SB 2949 for the following reasons:

- (1) Power purchase agreements should be approved only when they are in the public interest. The public interest favors an approach that does not intentionally waste energy.

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<sup>1</sup> See HECO Model Power Purchase Agreement for Renewable As-Available Energy, art. 20.



- (2) Currently, curtailment is handled through grid operations, and PUC policy generally disfavors grid operations that curtail renewable energy in favor of fossil energy. In the future, with more renewables, we may find that the electric system more frequently generates more energy than demanded at a given point in time. We may find that renewable energy is curtailed in favor of another form of renewable energy. The future electric grid must find ways to store or convert this energy, and our energy policy should make it possible for energy markets to implement innovative solutions.
- (3) The bill does not impact utility operations and does not allow third parties to use utility power lines. It is unambiguous that the bill only allows for renewable energy to be sold to third parties if that energy “will be stored for later distribution to an electric utility, or will be converted from electrical energy to another form of energy, including but not limited to chemical or thermal energy.”
- (4) Lower curtailment risk can provide a win-win-win for consumers, the utility, and renewable energy projects. The utility can win because lower curtailment risk should translate into lower PPA prices and lower risk of wasted energy. Consumers can win because less wasted energy should result in lower energy costs. Renewable developers can win because they will not be prohibited from working with entrepreneurs to find new markets for wasted energy.

Thank you for the opportunity to testify.

Senate Bill 2949, Relating to Energy  
Testimony of Hermina M. Morita

Aloha Chair Inouye and Members of the Committee:

Typically, a power purchase agreement is a contract between an independent power producer and the regulated electric utility subject to the approval by the Public Utilities Commission (PUC). Any agreement between the independent power producer and an unregulated party would not be under the jurisdiction of PUC unless it impacts any part of the Hawaii electric system and electric elements.

Hawaii electric system and electric element are statutorily defined in Chapter 269-141, HRS as follows:

"Electric element" means any plant, line, cable, facility, control system, equipment, or other technology used for the generation, transmission, distribution, storage, regulation, or physical control of electricity.

"Hawaii electric system" means all electric elements located within the State together with all interconnections located within the State that collectively provide for the generation, transmission, distribution, storage, regulation, or physical control of electricity over a geographic area; provided that this term shall not include any electric element operating without any interconnection to any other electric element located within the State.

Inadvertent consequences may occur when the Legislature, by statute, impedes the PUC's ability to thoroughly examine the economic, financial and technical viability of power purchase agreements. It is the electricity ratepayer/customer that bears the cost of power purchases. A bill such as this may inadvertently increase costs to ratepayer/customer if the PUC cannot deny or approve with conditions, based on its findings, a power purchase agreement because of statutory restrictions.

For example a project may produce both electricity sold to the utility and other non-regulated energy products or services. There is always a potential for costs to develop the facility or costs to produce non-regulated energy products or services to be passed on to the regulated side if the PUC is restricted in its ability to evaluate the financial viability of these types of projects in total.

Hermina Morita  
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