



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

DAVID Y. IGE
GOVERNOR

LUIS P. SALAVERIA
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
Web site: www.hawaii.gov/dbedt

Telephone: (808) 586-2355
Fax: (808) 586-2377

Statement of
LUIS P. SALAVERIA
Director
Department of Business, Economic Development, and Tourism
before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, February 2, 2016
8:30 am
State Capitol, Conference Room 325
in consideration of
HB 2291
RELATING TO RENEWABLE ENERGY

Chair Lee, Vice Chair Lowen, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports Administrative bill HB 2291, which modifies the definition of “renewable portfolio standard” by basing it on electrical energy ‘generation’ instead of ‘sales’ in order to more accurately reflect the percentage of renewable energy penetration in the State.

To fully meet the objectives of Act 97, Session Laws of Hawaii (SLH) 2015 establishing the 100% renewable portfolio standard (RPS) by 2045 and Act 38, SLH 2015 aspiring for greater energy security and self-sufficiency through the reduction and ultimate elimination of Hawaii’s dependence on imported fuels for electrical generation, an accurate method for calculating RPS must be used to accurately represent the percentage of renewable energy penetration in Hawaii.

DBEDT and other energy stakeholders understand the current method of calculating RPS is flawed as it is incongruent to compare ‘generation’ to ‘sales’ which causes the RPS to be inflated due to two fundamental reasons: (1) the current RPS excludes from the denominator customer-sited, grid-connected renewable energy and non-renewable energy generated; and (2) electrical energy sales does not include transmission and distribution (T&D) energy losses that occur between the points of electrical energy generation and the customer meter where sales are measured.

This measure is intended to remedy these issues, and DBEDT welcomes any additional feedback that may serve to fulfill the intent of providing a completely transparent and accurate representation of the state’s progress towards our 100% renewable objective in the utility sector.

Thank you for the opportunity to offer these comments in support of HB 2291.

TESTIMONY OF RANDY IWASE
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII
TO THE
HOUSE COMMITTEE ON
ENERGY AND ENVIRONMENTAL PROTECTION

February 2, 2016
8:30 AM

MEASURE: H.B. No. 2291

TITLE: RELATING TO RENEWABLE ENERGY

Chair Lee and Members of the Committee:

DESCRIPTION:

This measure would amend the current definition of “Renewable portfolio standard” to mean the percentage of electrical energy *generation* that is represented by renewable energy rather than the percentage of electrical energy *sales* that is represented by renewable energy.

POSITION:

The Commission offers the following comments for the Committee’s consideration.

COMMENTS:

The Commission notes that the term “electrical energy sales” is currently represented by a definite figure that is regularly reported by the utility. At the moment is unclear how the term “electrical energy generation” would be calculated and reported. The Commission is open to collaborating with DBEDT and other stakeholders on language to address these issues.

Thank you for the opportunity to testify on this measure.

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

**February 2, 2016, 8:30 am
Conference Room 325**

H.B. No. 2291 – Relating to Renewable Energy

**By Scott Seu
Vice President, System Operation
Hawaiian Electric Company, Inc.**

Chair Lee, Vice-Chair Lowen and Members of the Committee:

My name is Scott Seu. I am Vice President for System Operation at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric and its subsidiary utilities, Maui Electric and Hawaii Electric Light (collectively “Companies”).

Last year, the Hawaiian Electric Companies supported the passing of the new 100% RPS law, and we remain fully committed to moving our generation resources, and the resources of those with whom we contract for electricity generation, to be completely off of fossil fuels by 2045. While we appreciate the intent of this measure to revise the mathematics of the renewable portfolio standard (“RPS”) to more accurately reflect progress towards the state’s goal of moving off of fossil fuels for all electricity generation, we cannot support this bill as drafted.

First, the proposed changes to the RPS do not fully consider the implications of when customers generate their own electricity with fossil fuels. Although the proposed revised RPS calculation in its simplest form – total amount of generation from renewables divided by total amount of generation – is mathematically correct, it does not take into account the fact that more and more large customers are being presented with options to self-generate their electricity using fossil fuels.

Consider the not-too-distant scenario where the utility and its contracted independent power producers have successfully transitioned themselves to generating 100% of their electricity with renewables. But in the meantime, large commercial customers – hotels, schools, hospitals, government entities – have invested in or contracted with third party providers for fossil fuel -fired generation, just as is being actively marketed now around town whether it is in the form of self-supply contracts, combined heat and power units, or microgrids. The utility has no control over this customer generation, and furthermore, if the amount of customer fossil generation increases, then the utility and independent power producers must correspondingly decrease their production of renewable energy. At this point, RPS actually decreases rather than increases. The attachment to this testimony illustrates how this might happen.

Thus, as long as customer generation from fossil fuels is allowed to expand without some sort of oversight or accountability, then the RPS and the state’s clean energy policy have a major gap. Furthermore, since under the RPS law it is the utility that is held

accountable for achieving the RPS, our ability to fully meet our compliance obligations becomes increasingly beyond our control, and that is neither fair nor rational.

Note that we are not suggesting that customer generation be removed from the RPS. The RPS was purposely amended in 2011 to include grid-connected customer renewable electric generation, with the support of the PUC, DBEDT, and Hawaiian Electric. It was recognized that doing so would strengthen the utilities' incentive to support customer renewable energy generation, and that has indeed borne fruit.

Our other concern is that the bill does not make corresponding adjustments to the utility's RPS targets that account for the change in methodology. Using the existing methodology we were at approximately 21% RPS at the end of 2014, and it was on this basis that the legislature increased our 2020 RPS requirement to 30% with our support. If the new methodology is adopted, then new interim RPS targets need to be determined. To be clear, we are committed to the state's goal of moving off of fossil fuels for all electricity generation.

Fixing the math of the current RPS makes sense, but it must also be updated to align with market realities and public policy. Accordingly, we respectfully ask that this bill be amended to address these concerns. We would be happy to work with DBEDT and others to explore alternatives.

Thank you for this opportunity to testify.

Proposed RPS Equation of HB 2291:

RPS =
$$\frac{\text{Total Renewable Energy Generation}}{\text{Total Energy Generation both Fossil and Renewable}}$$

=
$$\frac{\text{Utility Renewables + Utility-Contracted Renewables + Customer Renewables}}{\text{Utility Fossil and Renewables + Utility-Contracted Fossil and Renewables + Customer Fossil and Renewables}}$$

	Year A	Year B	Year C	Year D	Year E	Year F	Year G
Utility and Contracted							
Renewable	10	15	20	25	30	35	25
Fossil	75	60	45	30	15	0	0
Customer							
Renewable	10	15	20	25	30	35	40
Fossil	5	10	15	20	25	30	35
Total	100	100	100	100	100	100	100
RPS	20.0%	30.0%	40.0%	50.0%	60.0%	70.0%	65.0%

Assume total generation on island is constant, no curtailment of customer generation,
and steady incremental growth of 5 units in all generation sectors except utility fossil



HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

February 2, 2016
(*Testimony is 1 page long*)

TESTIMONY IN OPPOSITION TO HB 2291

Chair Lee and Members of the Committee:

The Alliance for Solar Choice (TASC) appreciates the opportunity to comment on HB 2291, relating to renewable energy. TASC is respectfully opposed to this measure.

TASC advocates for maintaining successful distributed solar energy policies and markets throughout the United States. Collectively, TASC members serve a majority of the solar customers in Hawaii.

The Hawaii Public Utilities Commission's recent October 2015 decision established that the future of distributed power in Hawaii is coming from self-supply or "no export systems." Under this scenario, the electrical utility is no longer "selling" renewable energy produced from a rooftop solar system. Rather, the customer is producing and consuming power on-site or "behind the meter." If the customer needs power from the grid, he or she pays for it in due course (and pays for the operation of the grid through a monthly \$25 minimum bill).

When installing self-supply systems, the customer is paying for all costs related to (1) the clean energy generation and (2) the storage and consumption of that generation all behind the meter. The electrical utility does not create this new source of renewable energy. Accordingly, this customer-sited generation should **not** count towards the electrical utilities renewable portfolio standards.

Put another way: why should an off-grid product count towards HECO's ability to meet its renewable portfolio standards? The utility's benefit is from the reduction of demand and decreased need for electricity generation.

Thank you for considering our comments.



HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

February 2, 2016, 8:30 A.M.

Room 325

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 2291, WITH COMMENTS

Aloha Chair Lee, Vice Chair Lowen, and Committee members:

Blue Planet Foundation supports HB 2291, which would implement an accounting correction for the state's renewable portfolio standard ("RPS") calculation. Presently, the state's RPS calculation can provide utilities with "double credit" for some distributed energy sources, such as rooftop solar. This leads to the outcome that the calculated RPS can be greater than the actual percentage of renewable energy on Hawai'i's electric grids. House Bill 2291 would revise the RPS accounting calculation to address this potential outcome.

Blue Planet wishes to clarify that the present legal impact of this accounting issue is limited. As an example, for 2014 the Hawaiian Electric Companies RPS was calculated at 21.3%. From information filed with the Public Utilities Commission and reported by the State Department of Business, Economic Development & Tourism, we estimate that the actual amount of renewable energy as a percentage of the total energy was approximately 19%. While this difference of approximately 2% renewable energy represents a significant and important amount of clean energy, the accounting differential did not impact the Hawaiian Electric Companies' achievement of the law's RPS target. In other words, the companies would have met the statutory minimum RPS target¹ with or without the accounting correction in HB 2291. However, in future years, as the amount of distributed rooftop solar generation continues to grow, this accounting inaccuracy will grow in magnitude. **Thus, the correction in HB 2291 is appropriate and necessary.** Nonetheless, the RPS "double credit" for some rooftop solar provides a small incentive for utilities to allow their customers to interconnect rooftop solar systems. If the Committee is reluctant to implement the accounting correction immediately, it may consider implementing the new RPS calculation after some period of time, thus retaining this small rooftop solar incentive during the interim. For example, the Committee could consider amending the bill to implement the HB 2291 accounting correction beginning after the 2020 RPS target of 30%.

Thank you for the opportunity to testify.

¹ Under H.R.S. § 269-92, utilities were required to achieve 10% RPS by 2010, and 15% by 2015.

EEPtestimony

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, January 31, 2016 9:33 AM
To: EEPtestimony
Cc: leslie@dercouncil.org
Subject: *Submitted testimony for HB2291 on Feb 2, 2016 08:30AM*

HB2291

Submitted on: 1/31/2016

Testimony for EEP on Feb 2, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Leslie Cole-Brooks	DER Council of Hawaii	Support	Yes

Comments:

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EEPttestimony

From: mailinglist@capitol.hawaii.gov
Sent: Monday, February 01, 2016 12:15 PM
To: EEPtestimony
Cc: mendezj@hawaii.edu
Subject: *Submitted testimony for HB2291 on Feb 2, 2016 08:30AM*

HB2291

Submitted on: 2/1/2016

Testimony for EEP on Feb 2, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments:

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To: EEPtestimony
Cc: starmer@hawaii.edu
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LATE

HB2291

Submitted on: 2/2/2016

Testimony for EEP on Feb 2, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Kaelan	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 02, 2016 8:28 AM
To: EEPtestimony
Cc: darakawa@lurf.org
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LATE

HB2291

Submitted on: 2/2/2016

Testimony for EEP on Feb 2, 2016 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
David Z. Arakawa	Land Use Research Foundation of Hawaii	Comments Only	No

Comments: The Land Use Research Foundation of Hawaii supports Act 97 (SLH 2015), which established the 100 per cent Renewable Portfolio Standard (RPS) and supports the intent of HB 2291, which is to amend the RPS to more accurately reflect the amount of renewable energy generation in Hawaii. However, at this time, LURF must OPPOSE the current form of this bill, because it should be AMENDED to address the consequences of the 2011 amendment to the RPS, which allows for grid-connected customer renewable electric generation with fossil fuels. In 2011, the RPS law was amended, with the support of the Public Utilities Commission, the Department of Business, Economic Development and Tourism (DBEDT) and Hawaiian Electric, to support "customer renewable energy generation" (which also included fossil fuels). Hawaiian Electric does not have control over the customer-generation of electricity with fossil fuels. LURF understands that the unintended consequence of the current version of HB 2291 is that it does not account for the 2011 amendment to the RPS law and customer renewable energy generation, using fossil fuels; and would unreasonably hold Hawaiian Electric responsible for the such generation of energy, which they have no control over. LURF respectfully requests that this Committee work with Hawaiian Electric company, DBEDT and others to AMEND this measure.

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