

SB2536

Measure Title: RELATING TO WHEELING FOR EDUCATIONAL INSTITUTIONS.

Report Title: Educational Institutions; Wheeling; Electric Utility Companies; Public Utility Commission

Description: Authorizes state educational institutions to utilize wheeling to transmit renewable energy generated electricity to themselves at other locations, and requires the public utilities commission and electric utilities to adopt rules and tariffs consistent with the wheeling mandate.

Companion:

Package: None

Current Referral: EDU/TRE, CPH

Introducer(s): INOUE, KIDANI, SHIMABUKURO, Galuteria, Nishihara

DAVID Y. IGE
GOVERNOR



KATHRYN S. MATAYOSHI
SUPERINTENDENT

STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

Date: 02/09/2016

Time: 03:00 PM

Location: 229

Committee: Senate Education
Senate Transportation and Energy

Department: Education

Person Testifying: Kathryn S. Matayoshi, Superintendent of Education

Title of Bill: SB 2536 RELATING TO WHEELING FOR EDUCATIONAL INSTITUTIONS.

Purpose of Bill:

Department's Position:

The Department of Education (DOE) is in support of SB 2536. The DOE launched the Ka Hei Program in 2014, with the intent to drive towards the Board of Education's Policy 6710 goal of 90% clean energy by 2040. With limitations on net energy metering, this bill is one of the ways the DOE can use more clean energy in our schools and reduce our electricity costs by allowing the DOE to build photovoltaic systems at a larger scale.

The DOE defers to the Public Utilities Commission on the implementation of the administrative rules timeline.

Thank you for the opportunity to testify in support of SB 2536.



UNIVERSITY OF HAWAI'I SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committees on Education
and
Transportation and Energy
February 9, 2016 at 3:00 p.m.
By
Jan Gouveia
Vice President for Administration
University of Hawai'i System

SB 2536 – RELATING TO WHEELING FOR EDUCATIONAL INSTITUTIONS

Chairs Kidani, Inouye, Vice Chairs Harimoto, Gabbard, and members of the Committees:

The University of Hawai'i is supportive of the intention highlighted in SB 2536 to help the University achieve its net-zero energy goal by 2035 (as required in Act 199, SLH 2015).

Since 2014, the University has been working toward achieving a net-zero energy goal by 2035. To that end, the University is currently in the process of assessing the feasibility of developing a Photovoltaic Farm on the mauka lands associated with the University of Hawai'i West O'ahu campus. Initial research indicates that the site presents conditions that are ripe for generating at least 100 megawatts. To that end, the University has been working with HECO and consultants to determine next steps.

The University is one of the larger customers in the electrical utility for any system within each county of the state. While wheeling is one aspect that could be beneficial to the University in the short-term, we are also very aware that, as a major customer, any energy initiatives that we pursue could have impacts to remaining customers within the utility. As such, we are hopeful that recent University efforts to work with the electrical utility will continue to progress, as we believe a collaborative approach is the key to statewide energy modernization, and prolific alternative and renewable energy portfolios for all consumers.

While the University of Hawai'i is focused on lowering its cost of electricity and achieving an energy goal of net-zero, we are mindful that our solutions can be complex and have a greater consumer impact. As such, we support the intent of SB 2536 and defer to the Public Utilities Commission on the implementation of this measure.

TESTIMONY OF RANDY IWASE
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII
TO THE
SENATE COMMITTEES ON
EDUCATION
&
TRANSPORTATION AND ENERGY

February 9, 2016
3:00 PM

MEASURE: S.B. No. 2536

TITLE: RELATING TO WHEELING FOR EDUCATIONAL INSTITUTIONS

Chair Kidani, Chair Inouye, and Members of the Committees:

DESCRIPTION:

This measure explicitly authorizes State educational institutions to use and implement “state educational institution wheeling.” This measure requires the Public Utilities Commission (“Commission”) to establish rules pursuant to Chapter 91, Hawaii Revised Statutes (“HRS”) and requirements for the implementation of state educational institution wheeling by January 1, 2016. This measure also requires that all electric utilities file a proposed state educational institution wheeling tariff with the Commission by March 1, 2017. Finally, this measure requires the Commission to report on the status of the implementation of state educational institution wheeling, including any proposed legislation to the legislature prior to the 2017 legislative session and every regular session thereafter until completion.

POSITION:

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

COMMENTS:

The Commission notes that prior to establishing the rules, requirements, and tariffs necessary for the implementation of state educational institution wheeling it would be appropriate to open an investigatory docket to explore the feasibility of state educational institution wheeling in Hawaii. Such a docket proceeding would allow stakeholders the

opportunity to participate in addressing any issues associated with state educational institution wheeling in Hawaii and determining how to best implement the program.

The Commission also notes that in order to meet the timing requirements currently provided in this measure the Commission will likely be forced to divert the Commission's limited resources from other important matters currently before the Commission, especially if the Commission will be required to establish administrative rules pursuant to Chapter 91 by January 1, 2017.

Thank you for the opportunity to testify on this measure.

**TESTIMONY BEFORE THE SENATE COMMITTEES ON
EDUCATION
AND
TRANSPORTATION AND ENERGY**

S.B. No. 2536

Relating to Wheeling for Educational Institutions

Tuesday, February 9, 2016
3:00 pm
State Capitol, Conference Room 229

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

Chairs Kidani and Inouye, Vice Chairs Harimoto and Gabbard, and Members of the
Committees:

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. 2536.

This bill establishes authority for the State Department of Education and the
University of Hawai'i to wheel renewable energy over a utility's transmission and
distribution system and requires the Public Utilities Commission ("PUC") to adopt
rules and tariffs to implement the mandate, without making "state educational
institution wheeling" cost-prohibitive or infeasible. This bill requires the PUC to
establish rules no later than January 1, 2017, and utilities to file wheeling tariffs no
later than March 1, 2017, without first determining whether wheeling is feasible, has
definite benefits in Hawai'i, and is in the public interest.

Allowing independent power producers to sell electricity directly to the State
Department of Education and the University of Hawai'i will likely benefit the State
Department of Education and the University of Hawai'i at the expense of non-

wheeling customers who may have to pay for all the costs of the current infrastructure while impeding the utilities' ability to pursue 100% renewable energy by 2045. The current purchase power model used by the utility ensures that ALL customers can benefit from lower cost energy.

In Hawai'i, we now have the boldest energy goal in the nation: A 100 percent renewable energy portfolio standard by 2045. This requires the utilities to seek diverse resources to protect the resiliency of the supply. Wheeling attacks that strategy by focusing on short term costs and using the cheapest resource at the time, which may create an unbalanced set of resources. This increases the risk profile of the utilities which in turn will hurt our customers.

In addition, wheeling, as proposed, creates winners and losers between independent power producers – those who sell directly to a select group through wheeling vs. those currently with purchased power agreements with the utilities or currently negotiating Power Purchase Agreements with the utility. This bill will make obtaining renewable energy more difficult, which could result in higher prices for a majority of our customers.

Further, wheeling may result in the degradation of service reliability. The utility would not be a party to any wheeling contract and the utility will be unable to predict where the load will come on to the system or to make sure that the transmission infrastructure is adequate. There is less ability for the utility to negotiate to change operating requirements and project design to protect the system. The utilities need to be involved in setting operational reliability standards to assure system reliability.

In Hawai'i, there's no extension cord to the mainland. Unlike California and many other places we're compared to, we can't plug into the mainland grid, either for reliability or to buy or sell electricity to neighboring utilities. As loads continue to

decrease, as we have seen over the last 10 years, the loss of large customers will impair the sustainability of fair cost allocations to all customers, which will impair economic development and the attainment of our state renewable policies and goals. We must address the State's energy future as a whole and not with techniques that may sound reasonable as stand-alone concepts (especially those used in larger grids in the mainland with large manufacturing and commercial loads) but that may actually cause unfair cost allocations to customers.

Hawaii has the best chance of success when all stakeholders can participate in reasoned discussions. We believe the PUC has the jurisdiction to lead those discussions. The PUC has already initiated a proceeding to examine the feasibility of intra-governmental wheeling, a more focused investigation, in response to the 2004 Legislature's Senate Concurrent Resolution No. 180 ("S.C.R. No. 180"), but more importantly has initiated proceedings that are examining the transformation of the provision of electrical services in Hawaii and how state energy policy goals can best be achieved. The PUC should be allowed to continue its investigation into whether intra-governmental wheeling is feasible, how it would impact all customers in Hawaii, and whether it would fit into plans for the achievement of state energy policy goals and be in the public interest, before legislation is passed to implement retail wheeling.

Although we are opposed to wheeling because of the negative impacts to other customers, we are very supportive of, and are working with the Department of Education and the University of Hawaii to help them control their electricity bills and achieve their operational and sustainability goals while still benefiting all customers across the islands. For example, we recently proposed new time of use energy rates for PUC approval that would enable DOE to better control the costs of cooling students' classrooms, while helping the entire base of electric customers use more

renewable PV energy during the day. We have also been in discussion with the University of Hawaii considering different models of PV development for their West Oahu lands, and there are non-wheeling alternatives that can provide them greater economic benefits and which do not unfairly shift costs to other customers.

Accordingly, the Hawaiian Electric Companies oppose S.B. 2536.

Thank you for this opportunity to testify.



OPTERRA 1099 Alakea Street #2500
Honolulu, HI 96813

**Testimony to the Senate Committee on Education, and
Senate Committee on Transportation and Energy**

Tuesday, February 9, 2016 3:00 pm

Conference Room 229, State Capitol

RE: SENATE BILL 2536 RELATING TO WHEELING FOR EDUCATIONAL INSTITUTIONS

Chair Kidani, Vice Chair Harimoto and Members of the Education Committee:

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

Opterra Energy Services, ("Opterra") **supports** SB 2536, which authorizes state educational institutions to utilize wheeling to transmit renewable energy generated electricity to themselves at other locations and to require the public utilities commission and electric utilities to adopt appropriate and reasonable rules and tariffs to implement this mandate, without making state educational institution wheeling cost-prohibitive or infeasible. OpTerra supports mechanisms to expand customer choice and provide pathways for renewable energy innovation and generation, especially for educational institutions that are focused on student achievement.

This is in alignment with Act 97 which established 100% renewable portfolio standards, as well as BOE Policy 6170 on Sustainability <http://www.hawaiiboe.net/policies/6000series/Pages/6710.aspx>.

The Legislature in 2004, prompted by S.C.R. No. 180, recognized the State's dependence on imported oil to meet its energy needs and the necessity for the State to emphasize renewable energy production programs. The Legislature at the time requested that the commission explore ways to implement intra-governmental wheeling to facilitate government wheeling of electricity, and other regulatory measures to support the development of renewable energy systems by federal, state, and county agencies.

The Department of Education (DOE) needs a pathway to achieve 100% renewable energy while reducing energy costs. **The DOE is currently are unable to achieve 100% clean energy cost-effectively with current policy constraints.** Changes this past year to the Net Energy Metering program are problematic and have hampered the DOE from achieving their clean energy goals for several reasons. First, the size limit of 100 kW PV systems only covers a small portion of the overall load at a school. This was a problem before the addition of air conditioning, computers, and other equipment being added to schools. Secondly, the new "grid supplied" program does not allow the DOE to carry over credits month to month like the old program did. This presents a problem for the DOE in the summer months when PV solar production is high but usage at the school is low since it is summer break. Under the grid supplied program the DOE would not be able to apply the credits earned in the summer months or other breaks towards times later in the year like it was able to under the old Net Energy Metering program. This is why wheeling is very important for educational institutions.

Schools, unlike residences, actually use the solar PV energy produced during the day and would benefit from being able to use power produced without the need for storage. This makes wheeling much more



OPTERRA

attractive for schools than other end uses. Wheeling for public educational institutions will also reduce costs to taxpayers by allowing renewable energy systems to be built at a larger scale than a school by school basis.

Wheeling is consistent with both the current and future utility business models. OpTerra Energy Services supports fair compensation to the utility, as long as the compensation does not result in the program being cost-prohibitive or infeasible.

Thank you for the opportunity to testify.

Sincerely,

Brian Kealoha

Regional Director

THE SENATE

S.C.R. NO. 180

TWENTY-SECOND LEGISLATURE,
2004

S.D. 1

STATE OF HAWAII

H.D. 1

SENATE CONCURRENT RESOLUTION

The Public Utilities Commission is requested to explore HOW TO implement the concept of intra-governmental wheeling to facilitate government wheeling of electricity.

WHEREAS, the legislature finds that Hawaii relies on imported oil to meet over ninety per cent of the State's energy needs, leaving Hawaii critically vulnerable to supply interruptions and oil price volatility; and

WHEREAS, there is a need to take bold action to chart a progressive energy strategy for the State which should include the integration of Hawaii's indigenous renewable energy resources in electricity production to promote economic stability, enhance energy security, and demonstrate environmental stewardship; and

WHEREAS, while programs like the renewable energy income tax credit and the building of new power generation facilities by electric utilities may incur direct and indirect costs to the taxpayer or ratepayer, there are many other strategies that may have an insignificant or no impact on the taxpayer or ratepayer; and

WHEREAS, retail wheeling is defined as the process of transmitting electric power from a seller's point of generation across a third-party-owned transmission and distribution systems to the seller's retail customer; and

WHEREAS, renewable energy production could be encouraged if government agencies, as renewable energy producers (sellers), are allowed to transmit electricity to other governmental facilities (retail customer), over existing transmission lines of an electric public utility, which can be described as

"intra-governmental wheeling"; and

WHEREAS, "intra-governmental wheeling" can be further defined as using the concept of retail wheeling between:

- (1) Two or more county government agencies located on the same island;
- (2) Two or more state government agencies located on the same island; or
- (3) Two or more federal government agencies located on the same island.

WHEREAS, government agency or government agencies can mean any federal, state, or county department, commission, board, bureau, office, or other government establishment, or any quasi-public institution that is supported in whole or in part by government funds.

BE IT RESOLVED that the Public Utilities Commission is requested to explore how to implement the concept of intra-governmental wheeling to facilitate government wheeling of electricity and other regulatory measures to support the development of renewable energy systems by federal, state, and county agencies; and

BE IT FURTHER RESOLVED that certified copies of this Concurrent Resolution be transmitted to the Chair of the Public Utilities Commission.

Report Title:

The Public Utilities Commission is requested to explore and implement the concept of intra-governmental wheeling to facilitate government wheeling of electricity

Testimony before the Senate Committees On Education and Transportation and Energy

**By Evan K. Fujimoto
President, Graham Builders**

**February 9, 2016
3:00 pm, Conference Room 229**

**Senate Bill 2536
Relating to Wheeling for Educational Institutional**

Chairs Kidani and Inouye, Vice Chairs Harimoto and Gabbard, and Members of the Committees:

My name is Evan Fujimoto and I am testifying on behalf of Graham Builders, Inc. in opposition to SB 2536.

Passage of this bill will result in a few private companies making a profit by selling electricity while using the utility's infrastructure to do so. This profit will be at the expense of all non-wheeling electric company customers who will see an increase in electricity rates as they will have to pay for all the costs of that infrastructure without directly receiving any of the benefits.

As business owners, members of this community, and individual home owners, we maintain that is simply unfair that the legislature consider a measure that will enrich a few at the expense of everyone else who pays for electricity. Businesses, individual homeowners and people on fixed incomes can ill afford rate increases that can be and should be avoided.

Other alternatives must be explored to achieve the goal that this measure seems crafted to address.

Thank you for the opportunity to present this testimony.

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**Testimony to the Senate Committee on Education, and
Senate Committee on Transportation and Energy
Tuesday, February 9, 2016
3:00 PM.
State Capitol - Conference Room 229**

RE: SB 2536: Relating to Wheeling for Educational Institutions.

Dear Chairs Kidani & Inouye, Vice-Chairs Harimoto & Gabbard, and members of the Committees:

My name is Gladys Marrone, Chief Executive Officer for the Building Industry Association of Hawaii (BIA-Hawaii), the Voice of the Construction Industry. We promote our members through advocacy and education, and provide community outreach programs to enhance the quality of life for the people of Hawaii. BIA-Hawaii is a not-for-profit professional trade organization chartered in 1955, and affiliated with the National Association of Home Builders.

BIA Hawaii opposes S.B. 2536 which authorizes state educational institutions to utilize wheeling to transmit renewable energy generated electricity to themselves at other locations, and requires the public utilities commission and electric utilities to adopt rules and tariffs consistent with the wheeling mandate.

The term "wheeling" broadly refers to the process of transmitting electric power from a seller's point of generation across a third-party-owned transmission and distribution system to the seller's retail customer. The bill states the State's educational institutions must be able to utilize wheeling in order to facilitate the generation of renewable energy where feasible and to wheel electricity to where they may need it at locations where it is not feasible to site renewable energy generation facilities.

Currently, all rate payers pay for the cost to upgrade and maintain the electrical infrastructure. As drafted, the bill will result in a private companies making a profit by selling electricity while using the utility's infrastructure to do so. This profit will be at the expense of all non-wheeling electric company customers who will see an increase in electricity rates as they will have to pay for all the costs of that infrastructure without directly receiving any of the benefits.

We are opposed to S.B. 2536 as presently drafted, and appreciate the opportunity to express our views on this matter.



**SENATE COMMITTEE ON EDUCATION
SENATE COMMITTEE ON TRANSPORTATION AND ENERGY**

February 9, 2016, 3:00 P.M.

Room 229

(Testimony is 1 page long)

TESTIMONY IN STRONG SUPPORT OF SB 2536

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

The Blue Planet Foundation supports SB 2536, which would provide new mechanisms for schools to obtain clean energy, thereby allowing those schools to better manage the energy costs associated with cooling classrooms. We note that the policy implemented by SB 2536 should not be objectionable to the state's electric utilities. Any wheeling under SB 2536 would be subject to tariffs approved by the Public Utilities Commission. Thus, utilities would continue to earn revenue for the use of its energy transmission and distribution infrastructure, and would continue to earn a profit on necessary investments in that infrastructure.

This bill simply allows for competition in generating the energy served to schools over the utility grid, by enabling schools to obtain that energy from the source that is most responsive to the needs of the schools. In the face of that competition, if utilities can provide the best solutions for schools, utilities will continue to earn revenue and profit on that generation infrastructure.

If the Committees are considering amendments, we suggest considering a clarification that energy wheeled under this measure must be renewable energy. This will ensure that any educational investments in this energy infrastructure will be long-lived and consistent with the state's energy goals.

Thank you for the opportunity to testify.



**Testimony to the Senate Committee on Education and Committee on
Transportation & Energy
Tuesday, February 9, 2016 at 3:00 P.M.
Conference Room 229, State Capitol**

**RE: SENATE BILL 2536 RELATING TO WHEELING FOR EDUCATIONAL
INSTITUTIONS**

Chairs Kidani and Inouye, Vice Chairs Harimoto and Gabbard, and Members of the Committees:

The Chamber of Commerce Hawaii ("The Chamber") **opposes** SB 2536, which authorizes state educational institutions to utilize wheeling to transmit renewable energy generated electricity to themselves at other locations, and requires the public utilities commission and electric utilities to adopt rules and tariffs consistent with the wheeling mandate.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 1,000 businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

The term "wheeling" broadly refers to the process of transmitting electric power from a seller's point of generation across a third-party-owned transmission and distribution system to the seller's retail customer. The bill states the State's educational institutions must be able to utilize wheeling in order to facilitate the generation of renewable energy where feasible and to wheel electricity to where they may need it at locations where it is not feasible to site renewable energy generation facilities.

Currently, all rate payers pay for the cost to upgrade and maintain the electrical infrastructure. As drafted, the bill will result in private companies making a profit by selling electricity while using the utility's infrastructure to do so. This profit will be at the expense of all non-wheeling electric company customers who will see an increase in electricity rates as they will have to pay for all the costs of that infrastructure without directly receiving any of the benefits.

As business owners, members of this community, and individual home owners, we maintain that is simply unfair that the legislature consider a measure that will enrich a few at the expense of everyone else who pays for electricity. We are opposed to S.B. 2536 as presently drafted, and appreciate the opportunity to express our views on this matter.

Thank you for the opportunity to testify.

Testimony before the Senate Committees On Education and Transportation and Energy

**February 9, 2016
3:00 pm, Conference Room 229**

**Senate Bill 2536
Relating to Wheeling for Educational Institutional**

Chairs Kidani and Inouye, Vice Chairs Harimoto and Gabbard, and Members of the Committees:

My name is Jim Walsh and I am testifying as an individual in opposition to SB 2536.

My concern with this bill is that it written to satisfy only one section of the community. I think that this bill is approaching the idea of "wheeling" with too limited a view point. I would like to see a more holistic approach to the concept of "wheeling". It will need to be good for the majority of the community rather than one specific group.

If this bill passes, it will more than likely raise the utility rates for the non-wheeling customers. The same thing happened with rooftop solar. While rooftop solar is a good thing, the cost to maintain the grid was shared with less people. This will again happen if this bill passes. The grid maintenance group will get smaller and smaller.

Other alternatives must be explored to achieve the goal that this measure seems crafted to address.