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TO THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

THE TWENTY-NINTH LEGISLATURE
REGULAR SESSION OF 2017

THURSDAY, FEBRUARY 2, 2017
8:30 A.M.

TESTIMONY OF DEAN NISHINA, EXECUTIVE DIRECTOR, DIVISION OF
CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER
AFFAIRS, TO THE HONORABLE CHRIS LEE, CHAIR, AND MEMBERS OF THE
COMMITTEE

HOUSE BILL NO. 1567 - RELATING TO THE PUBLIC UTILITIES COMMISSION

DESCRIPTION:

This measure proposes to authorize the Public Utilities Commission (“PUC” or “Commission”) to establish preferential electricity rates for communities that serve as geographic hosts for renewable energy projects.

POSITION:

The Division of Consumer Advocacy (“Consumer Advocate”) has concerns with this bill and would like to offer the following comments for the Committee’s consideration.

COMMENTS:

Any subsidized rates for one group of utility customers necessarily entail increased rates for the remaining utility customers. Therefore, the cross-subsidization inherent in this proposal is a matter of concern. The Consumer Advocate recognizes the importance of communities that host renewable energy facilities that will be required to fulfill the state’s transition to 100% renewable energy. The Consumer Advocate also takes note of the community benefits programs or packages that have been offered to communities that have not included preferential electricity rates. The Consumer Advocate contends that it is important to encourage community benefits programs where the developer of the projects provides significant, if not all of the,

contributions towards the community benefits. The developers of these renewable energy projects will likely be profiting from placing their projects in the communities and the developers should be willing to share such profits with the communities who will be hosting those projects. The Consumer Advocate also has concerns with the administrative effort and costs that may be associated with establishing community based preferential rates.

Thank you for this opportunity to testify.

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

February 2, 2017
8:30 am

MEASURE: H.B. No. 1567

TITLE: RELATING TO THE PUBLIC UTILITIES COMMISSION

Chair Lee and Members of the Committee:

DESCRIPTION:

This measure would authorize the PUC to establish preferential electricity rates for ratepayers residing in communities that serve as geographic hosts for renewable energy projects.

POSITION:

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

COMMENTS:

The Commission notes that establishing preferential rates for one class of customer results in subsidization through the rates charged to all other customers. Establishing preferential rates for one class of customer may be inconsistent with the fundamental regulatory principles of establishing rates based on cost-causation and prohibiting discrimination between similarly situated customers.

If it is the will of the legislature to provide a financial benefit to the geographic hosts of renewable energy projects, a tax credit or other incentive provided at the discretion of the legislature may be more appropriate.

Thank you for the opportunity to testify on this measure.



HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Feb. 2, 2016, 8:30 A.M.
Room 325
(Testimony is 2 pages long)

COMMENTS ON HB 1567

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

Blue Planet Foundation supports the intent of this bill, which is to fairly allocate, between communities, the benefits and burdens of our electricity sector. However, we are very concerned that by singling out renewable energy projects, the bill unintentionally creates a false impression that the transition to renewable energy will create disparate community impacts. In reality, the opposite is true.

Centralized fossil fuel electricity generation, by its nature, is centralized in specific locations. Fossil fuel generation has sizeable impacts on the communities around those centralized locations, through phenomena such as emissions, freshwater use, and aesthetics. Other aspects of the existing grid, such as transmission lines, are also inherently located in certain communities and not others. As a result, some communities have, for decades, served as hosts to more energy infrastructure than other communities.

In comparison, renewable energy generation is more diffuse at every scale – from distributed rooftop solar generation, to solar and wind farms that tend to have a smaller capacity than the state's largest fossil fuel generators. Thus, the transition to renewable energy, while it may result in energy infrastructure being located in more locations and in new locations, should not be assumed to worsen the existing disparity between communities created by our state's energy infrastructure. If anything, renewable energy can help to more evenly distribute the benefits and burdens of our energy system.

As a result, we suggest amending the bill to enable the PUC to establish preferential rates for ratepayers residing in communities that serve as geographic hosts *to any part* of the energy system, and particularly for communities that have hosted (and are hosting) fossil fuel infrastructure.

§269- Preferential electricity rates for communities hosting renewable energy projects. The public utilities commission may authorize preferential electricity rates for ratepayers residing in communities that serve as geographic hosts for energy

infrastructure, with additional special consideration given to those communities that have traditionally hosted fossil fuel-based infrastructure. The application process for obtaining preferential electricity rates may be established by the public utilities commission.

Thank you for this opportunity to provide comments.



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COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Rep. Chris Lee, Chair
Rep. Nicole E. Lowen, Vice Chair

DATE: Thursday, February 2, 2017
TIME: 8:30am
PLACE: Conference Room 325

re: HB 1567 Relating to the PUC

SUPPORT & PROPOSED AMENDMENT

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

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 47 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.

SECTION 1. Chapter 269, Hawaii Revised Statutes, is amended by adding a new section to part I to be appropriately designated and to read as follows:

"§269- ~~Alternative Preferential~~ electricity rates for communities hosting renewable energy projects. The public utilities commission may authorize ~~alternative preferential~~ electricity rates for ratepayers residing in communities that serve as geographic hosts for renewable energy projects. The application process for obtaining ~~alternative preferential~~ electricity rates may be established by the public utilities commission."

In the beginning all electricity came from the utility power plant, and radially spread out to end users. That system no longer exists.

Electricity and telecommunications move in multiple ways along a utility's transmission and distribution grid. Today, 99 percent of the total physical number of all electricity generating stations in the State are rooftop solar systems. In aggregation, on the major islands, rooftop solar output exceeds the utility's largest single power plant.

Home energy storage systems, smart energy efficiency systems, and demand response mechanisms will allow customers to be compensated for providing frequency and voltage support to the grid.

There are proposals floating around that transform the older cookie-cutter customer approach.

The Commission allows HECO to charge more for Downtown Commercial Customers since their buildings are interconnected to two different substations. HECO is currently proposing a discount for customers with medical issues.

House Bill 1574 proposes lower rates for lower and middle income ratepayers. House Bill 1567 proposes "preferential electricity rates for communities that serve as geographic hosts for renewable energy projects."

The Public Utilities Commission examined geographic-based rate reductions in docket 2005-0146, involving a proposed Campbell Industrial Park generation station and the residents of zip code 96707 "which generally includes without limitation Kapolei, Makakilo, Honokai Hale and Ko Olina". The Commission could not justify giving a discount to someone living in upper Makakilo, and not to a Waianae resident who drove past Campbell Industrial Park twice every weekday.

There are also potential drawbacks to offering geographic discounts. Rural communities could see their neighborhoods transformed from open space and agriculture, to industrialized mega-renewable energy plants, with the justification, oh, you're getting compensation!

Life of the Land has raised the issue of product differentiation. Commercial customers who want higher reliability levels, but who do not want to pay for on-site systems, should pay a premium for added grid-based reliability, under the existing cost-causer principle.

National Studies

In 1990 the **National Regulatory Research Institute** (NRRI) published "Reliability Differentiated Pricing of Electricity Service."

"It has been suggested that electricity customers be given the choice of opting for different levels of service reliability. Customers would then subscribe to the level of reliability that best suits them and their processes. Such a choice would unbundle the service."

"A review of electricity product differentiation" by **C.K. Woo** et al was published in the journal "Applied Energy" in 2013.

"Product differentiation recognizes that customers have heterogeneous preferences, with varying willingness-to-pay (WTP) for differentiated products. From a customer's perspective, electricity has several distinct attributes: power quality, level of reliability, time of use (TOU), volume of usage (kWh), maximum demand (kW), and level of environmental impact. A differentiated product can be formed by packaging its non-price attributes at a commensurate price."

Siripha Junlakarn has a B.Eng., an M.Eng. from Chulalongkorn University, Thailand and is pursuing her Ph.D. in Engineering and Public Policy at Carnegie Mellon University.

"Although different end-users might have different reliability preferences, these preferences are not taken into account in the investment decision made by a utility company. If the utility can provide differentiated reliability options according to customer preferences, it enables customers to price their reliability options according to their need. ...

Smart grid technologies, such as distribution automation and advanced metering infrastructure, can effectively manage power outages and provide a differentiation of reliability based on customers' value of reliability."

In 2013 the **National Association of Regulatory Utility Commissioners** (NARUC) published "Resilience in Regulated Utilities" by **Miles Keogh and Christina Cody**. "Commissions may decide that the smartest approaches to investing in resilience may be those that not only differentiate between classes, but also within classes."

The HECO Redundant Distribution Grid

The PUC Annual Report for 1999-2000 stated that "HECO was authorized to expend ...\$4.1 million for the Downtown network secondary cable replacement project, \$3.2 million for the Downtown network primary reconfiguration project."

On June 5, 2009 HECO responded to discovery question (CA-IR-13) in the HECO Companies Advanced Metering Infrastructure (Smart Meter) Project (Docket No. 2008-0303)

The "downtown network distribution systems, [is] known generally for providing high reliability. Customers in these systems are served from multiple distribution transformers through a maze of interconnected transformer secondary conductors."

Commercial customers existing within the downtown network area pay higher rates for higher levels of reliability.

HECO's 2012 Schedule P tariff notes that "because of the inherent operating conditions in the

downtown area supplied from the Company's underground network system ...the demand and energy charges will be increased by 0.9%."

What is needed is the transformation of the end-user, the ratepayer, into a multi-faceted prosumer base, where metered entities pay for what they want to buy, and are paid for what they deliver to the grid.

Mahalo,

Henry Curtis
Executive Director

From: mailinglist@capitol.hawaii.gov
Sent: Monday, January 30, 2017 6:33 PM
To: EEPtestimony
Cc: mendezj@hawaii.edu
Subject: *Submitted testimony for HB1567 on Feb 2, 2017 08:30AM*

HB1567

Submitted on: 1/30/2017

Testimony for EEP on Feb 2, 2017 08:30AM in Conference Room 325

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

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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