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Statement of
RICHARD C. LIM
Director

Department of Business, Economic Development, and Tourism
before the

SENATE COMMITTEE ON WAYS AND MEANS

Friday, March 28, 2014

9:15 a.m.

State Capitol, Conference Room 211

in consideration of

HB 1943, HD2, SD1

RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM.

Chair Ige, Vice Chair Kidani and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports HB 1943, HD 2, SD 1, which requires the Public Utilities Commission (PUC) to “commence regulatory action to address the technical, policy, and economic issues associated with the modernization of the State’s electric grids” based on amended principles stated in section 269-145.5(b), Hawaii Revised Statutes.

DBEDT understands the importance of taking steps to modernize Hawaii’s electrical grid in support of vital clean energy objectives; and we believe it is essential that those steps adhere to State’s established energy policy directives of balancing technical, economic, environmental, and cultural considerations while allowing for market-driven solutions when possible. We support the current draft of the bill which was agreed upon, for the most part, in a “grid modernization working group” consisting of interested parties including the electric utilities, the solar industry and environmental advocacy groups as well as Legislative staff, the PUC, the Consumer Advocate and DBEDT.

Thank you for the opportunity to provide comments on HB1943, HD 2, SD 1.

TESTIMONY OF HERMINA MORITA
CHAIR, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
SENATE COMMITTEE ON WAYS & MEANS

MARCH 28, 2014
9:15 a.m.

MEASURE: H.B. No. 1943, H.D. 2, S.D. 1

TITLE: Relating to the Modernization of the Hawaii Electric System

Chair Ige and Members of the Committee:

DESCRIPTION:

This measure proposes to amend Section 269-145.5, Hawaii Revised Statutes (“HRS”), by requiring the Public Utilities Commission (“Commission”) to “balance technical, economic, environmental, and cultural considerations associated with modernization of the electric grid” based on principles including the diversification of renewable energy resources; the expansion of energy use management options for customers; the maximization of distribution generation (“DG”) in the State in a manner that is cost-effective, non-discriminatory, and at just and reasonable rates; the determination of fair compensation for grid services provided to customers and for services provided to the grid by DG customers and other non-utility providers; and the maintenance or enhancement of grid reliability and safety. The Commission is also required to commence regulatory action to “address the technical, policy, and economic issues associated with the modernization of the State’s electric grids, based on the principles identified in [HRS] section 145.5(b)...” The Commission may take additional regulatory actions at its discretion.

The Commission must report its findings and recommendations prior to the 2016 legislative session from regulatory action taken related to this measure, in addition to an interim progress report.

Both the Commission and the Division of Consumer Advocacy within the Department of Commerce and Consumer Affairs (“Consumer Advocate”) are exempted from HRS § 103D-304 for the purposes of taking regulatory action related to this measure. Appropriations from the Public Utilities Commission Special Fund for fiscal year 2014-2015 for the Commission and the Consumer Advocate to carry out regulatory actions are made.

POSITION:

The Commission supports the intent of this measure, which incorporates language developed by a working group facilitated by the Senate Committee on Energy & Environment (“Working Group”). The Commission would also like to offer the following comments.

COMMENTS:

H.B. No. 1943, H.D. 2, S.D. 1 includes language discussed and agreed to by the members of the Working Group, including the Commission, the Consumer Advocate, Department of Business, Economic Development, and Tourism, the Hawaiian Electric Companies, Kauai Island Utility Cooperative, and proponents of customer-sited photovoltaic systems.

The Commission would like to point out for the Committee’s consideration that the sum appropriated under Section 5 [page 8, line 3 to line 4] of this measure should be expended by the ***division of consumer advocacy*** of the department of commerce and consumer affairs, rather than the department of commerce and consumer affairs.

Thank you for the opportunity to offer comments on this measure.



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Testimony of ERIK KVAM
President of Renewable Energy Action Coalition of Hawaii
e-mail: Kvam@REACHhawaii.org

**In SUPPORT of HB 1943 HD2 SD1 RELATING TO THE MODERNIZATION OF
THE HAWAII ELECTRIC SYSTEM**

**Before the
SENATE COMMITTEE ON WAYS AND MEANS**

Friday, March 28, 2014 9:15 a.m.

Aloha Chair Ige, Vice-Chair Kidani and members of the Committee.

My name is Erik Kvam. I am the President of Renewable Energy Action Coalition of Hawaii (REACH), a trade association whose vision is a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii.

REACH is in **SUPPORT** of HB 1943 HD2 SD1.

Hawaii's solar power industry is in crisis. Customers are not ordering and solar power installers are laying off workers because the HECO utilities have braked installation of new solar power systems until the utilities decide whether and how to upgrade the utilities' substations to accommodate lots more systems.

How did this happen? This crisis is happening because the utilities seem to have no planning process for systematically evaluating options for achieving 100% renewable energy. The utilities seem to have no process for figuring out what options -- like options to upgrade substations to accommodate lots more solar power systems -- in what amounts in what order will get us to 100% renewable energy at the greatest savings to customers and themselves.

REACH **SUPPORTS** HB1943 HD2 SD1 because the PUC proceeding required by HB1943 HD2 SD1 would provide an appropriate forum for conversations with Hawaii's electric utilities about their planning goals and their evaluations of grid modernization options, including options for grid upgrades to accommodate anticipated growth in customer generation.

Mahalo for providing this opportunity to testify.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Before the Senate Committee on Ways and Means

Friday, March 28, 2014, 9:15 a.m., Room 211

HB 1943 HD 2 SD 1: Relating to the Modernization of the Hawaii Electrical System

Aloha Chair Ige, Vice-Chair Kidani, and members of the Senate Committee on Ways and Means,

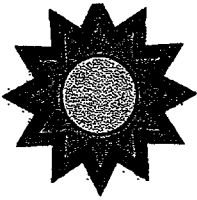
On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify in strong support for HB 1943 HD 2 SD 1, which directs the public utilities commission to open a proceeding by July 1, 2014 to address the technical, policy, and economic issues associated with the modernization of Hawaii's electricity grids. HSEA is a non-profit trade organization that has been advocating for solar energy since 1977, with an emphasis on solar hot water (SHW) and Photovoltaics (PV) in both residential and small commercial installations. We currently represent 81 companies, which employ thousands of local workers in the solar industry. With 37 years of advocacy behind us, HSEA's goal is to work for a sustainable energy future for all of Hawaii.

Hawaii currently faces unprecedented challenges in moving forward in our clean energy goals as we grapple with our aging grid infrastructure. Reduced grid access has resulted in slower and stalled out progress in reaching our clean energy goals, and a continued reliance on imported fossil fuels. Reduced and slowed grid access also means lost jobs, a slowed economy, billions of Hawaii dollars leaving the state, reduced tax revenues, and lost opportunities for customers to take charge of their bills and invest in the state's green infrastructure. Also, reduced grid access stands to impact the recently adopted on-bill financing, on-bill repayment, and GEMS, which would have made available low cost funding for hard to reach customers like renters and low income ratepayers. Without grid access, these programs will go nowhere.

Multiple stake holders including the utility, the commission, the Sierra Club, HSEA, and other industry partners have all worked together on this draft to ensure its success and provide a direction for a docket that will satisfy all parties. HB 1943 HD 2 SD1 also includes a provision to provide funding for the Commission to complete its task in a timely manner and to have the funds to hire experts as needed. Key in this provision is the fact that these funds come from the "special fund" which is funded by a tax on utility revenues and meant specifically to be used for regulatory investigations. HSEA believes that the special fund could not be put to better use, given our current situation regarding grid infrastructure.

Everyone agrees that the issues of grid access and cost allocation are complex. But the discussion should have begun in earnest years ago. What technical upgrades are available, and how would they be implemented? What is the cost, and how should it be allocated? How can we best meet our clean energy goals, and beyond, while having a robust utility grid, and a variety of clean energy sources? Time is short, and now is the time to bring our grid up to "grid 2.0."

Thank you for the opportunity to testify
Leslie Cole-Brooks
Executive Director
Hawaii Solar Energy Association



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Testimony of Inter-Island Solar Supply
In Regard To

H.B. 1943, H.D. 2, S.D. 1 Relating to Electrical Grid Modernization
Before The
Senate Committees on Ways and Means
Friday, March 28, 2014, 9:15 a.m.

Chair Ige, Vice-Chair Kidani and members of the committee, my name is Richard Reed and I am the president of Inter-Island Solar Supply. **We strongly support the passage of H.B. 1943, H.D. 2, S.D. 1.**

It is our position that the PUC must tackle the technical, policy and economic issues associated with distributed generation and interconnection simultaneously, with the highest immediate priority going to the technical and engineering upgrades that will allow increased grid access for homeowners and businesses while maintaining system safety and reliability.

There continues to be a perception that net-energy metering (NEM) is only for rich folks and that non-participating ratepayers will be left holding a very heavy bag containing significantly higher rates. This is a misconception for four primary reasons:

First, high electric rates in Hawaii are not caused by renewables; they are primarily a function of our continuing dependence on expensive low-sulfur crude oil.

Second, the new world of creative solar financing including long-term low interest loans, leases and power purchase agreements, provides all credit worthy ratepayers with a means to lower or at least stabilize their electric bills. Our banks and credit unions, moreover, have developed competitively priced PV financing options for those that wish to own their systems.

Third, the State's innovative GEMS green finance program is designed to help precisely those ratepayers that want PV, but do not qualify for conventional finance.

Forth, community-based solar as proposed in HB 2141/SB 2934 would allow ratepayers living in condos or homes that cannot easily or effectively deploy solar to buy shares in large-scale PV or wind projects and thus lower their utility costs.

The catch here is that all of these democratizing finance options are of no help without grid access. Therefore, the Commission should first focus on the best and most cost-effective technical solutions that will provide increased and continuing grid access.

Grid modernization is not, however, a cost free proposition. This docket has the potential to impact customer electric bills as well as utility financial returns. One essential purpose

of this analysis should be to accurately parse the costs and benefits associated with high saturation DG as well as renewable utility scale projects.

There are other important questions to consider. For example, what distributed generation benefits inure to all ratepayers and how should we value them? This is not simply a matter of costs, as one might assume from reading the Edison Electric Institute's work on DG, with no offsetting ratepayer benefits.

For example, we find that appropriate, targeted and timely utility capital expenditures – especially for Oahu's aged grid – that allow more DG while minimizing the impact on all ratepayers, is a significant public benefit. Importing and burning less oil makes us more secure, mitigates environmental damage, promotes our state's green image, keeps billions of ratepayer dollars in the state for reinvestment, creates good jobs and expands the tax base. All of these, we would argue, are valuable public benefits that are diminished by less, rather than more, DG and energy efficiency.

There are also some that argue that they receive no direct personal benefit from renewables because they live in a high-rise while DG only benefits those that live in single family or low-rise multi-family housing. With the adoption of community based solar (HB 2141/SB 2934) this argument, while already specious, becomes irrelevant.

The PUC has previously ruled in the Energy Efficiency Docket (05-0069) and other proceedings that **all ratepayers** benefit from our statutory (EEPS) energy efficiency programs. Homeowners do not directly benefit from chiller or large motor and commercial lighting upgrades. Condo dwellers do not directly benefit from residential solar water heating installations. Neither group directly benefits from equipment upgrades in hotels or airports. In reality, all of us **collectively** benefit from investments in energy efficiency made by individuals, condo boards, businesses, hotels or the state government.

All ratepayers now pay a small monthly Public Benefit Fund surcharge that supports our EEPS goal of achieving 30% of all our energy needs from efficiency gains by 2030. The Commission long ago judged that this small incremental charge is cost-effective across the full suite of approved residential, commercial and industrial efficiency measures and is also clearly in the public interest.

Are the public benefits from NEM and DG really that much different from those received from EEPS and energy efficiency? We think not and are supported by regulatory precedent in Hawaii.

On the negative side of the ledger, H.B. 1943, H.D. 2, S.D. 1 allows the PUC too much time for deliberation. The docket issues outlined in this legislation require urgent attention. We are in this pickle precisely because of inadequate planning and foresight. We need immediate solutions to the technical and engineering aspects of grid modernization that will allow both NEM/DG and utility scale renewable energy projects to coexist in a manner beneficial to all ratepayers.

Without a prompt, targeted D & O focused first on the system-wide technical upgrades that will allow safer interconnection, additional damage will be done to Hawaii's ratepayers and the solar industry. We believe that eight to nine months should provide adequate time to complete this essential first piece of the docket. **Industry groups and HECO already have spent nearly seven months working through these technical and engineering upgrades and challenges.**

Thank you for the opportunity to provide these comments.

**TESTIMONY BEFORE THE SENATE COMMITTEE ON
WAYS AND MEANS
H.B. NO. 1943, H.D. 2 S.D. 1**

RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM

March 28, 2014
9:15 am
Conference Room 211

Scott Seu
Vice President, Energy Resources and Operations
Hawaiian Electric Company, Inc.

Chair Ige, Vice Chair Kidani, and Members of the Committee:

My name is Scott Seu and I represent Hawaiian Electric and its subsidiary utilities Maui Electric and Hawaii Electric Light.

We support the intent of HB 1943 HD2 SD1 to open a Public Utilities Commission review of technical, economic, environmental and cultural issues associated with modernization of the electric grid. This SD1 is improved over the original bill on which we expressed strong concerns, and we appreciate our having had productive discussions with other stakeholders. That said, we still have a concern that the bill contains proposed statutory language that could be problematic in its implementation.

The proposed language states that principles should be to “enable a diverse portfolio of renewable energy resources” and to “maximize interconnections of distributed generation to the State’s electric grids on a cost-effective basis at non-discriminatory terms and at just and reasonable rates, while maintaining the reliability of the State’s electric grids, and allow such access and rates through applicable rules, orders, and tariffs as reviewed and approved by the commission.” We agree that interconnections should be governed by non-discriminatory terms and just and reasonable rates, while ensuring reliability of the grid. However, statutorily requiring that distributed generation interconnections be maximized would run counter to achieving a diverse renewable energy portfolio, as other energy resources that are potentially more cost-effective would be taken off the table to allow for customer distributed generation.

Again, we support the intent of HD 1943 HD2 SD1, to open a PUC review of technical, policy, and economic issues associated with modernization of the electric grid. However, this proceeding should not be constrained by statutory language that would bind the Commission and set unrealistic expectations for our customers.

We note that SB 2656 SD2 has adopted language that would achieve this purpose. If the Committee chooses to move this bill forward, we respectfully ask that HB 1943 HD2 SD1, be amended to adopt the language of SB 2656 SD2.

Thank you for this opportunity to testify.



Directors

Jody Allione
Silver Ridge

Joe Boivin
Hawaii Gas

Kelly King
Pacific Biodiesel

Warren S. Bollmeier II
WSB-Hawaii

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE
HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE
SENATE COMMITTEE ON WAYS & MEANS

HB 1943 HD2 SD1, RELATING TO THE MODERNIZATION
OF THE HAWAII ELECTRIC SYSTEM

March 28, 2014

Chair Ige, Vice-Chair Kidani and members of the Committee, I am Warren Bollmeier, testifying on behalf of the Hawaii Renewable Energy Alliance (HREA). HREA is an industry-based, nonprofit corporation in Hawaii established in 1995. Our mission is to support, through education and advocacy, the use of renewables for a sustainable, energy-efficient, environmentally-friendly, economically- sound future for Hawaii. One of our goals is to support appropriate policy changes in state and local government, the Public Utilities Commission and the electric utilities to encourage increased use of renewables in Hawaii.

The purposes of HB 1943 HD2 SD1 are to: (i) amend the public utilities commission principles regarding the modernization of the electric grid, (ii) require the commission to commence regulatory action no later than July 1, 2014, (ii) address the technical, policy, and economic issues associated with the modernization of the State's electric grids, and (iii) appropriate funds to cover costs of the proceeding.

HREA **strongly supports** this measure with comments and recommendations:

- 1) Comments. Clearly, this measure supports our clean energy goals. Its intent is also clear regarding the need to modernize our electric grids without which, in our opinion, it will be difficult to integrate the level of renewables needed to meet our clean energy goals:
 - a) We strongly support “the development of a diverse portfolio of renewable energy resources”) that includes both utility-scale and distributed systems, and
 - b) We strongly support the role of the Public Utility Commission to open a docket on grid modernization, which will benefit from the lessons learned on the Reliability Standards Working Group Docket, including integration issues for both distributed generation to off-set customer loads and utility-scale systems for export of power to the utility.
- 2) Recommendations: We recommend the committee pass this measure out.

Mahalo for this opportunity to testify.