



1110 University Avenue, Suite 402

Honolulu, Hawaii 96826

Tel: (808) 371-1475

www.REACHhawaii.org

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

**In SUPPORT of HB 1943 HD 2 RELATING TO
MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM**

**Before the
HOUSE COMMITTEE ON FINANCE**

February 20, 2014 1:30 p.m.

Aloha Chair Luke, Vice-Chairs Nishimoto and Johanson 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 that envisions a Hawaiian economy powered 100% by renewable energy sources indigenous to Hawaii.

REACH is in **SUPPORT** of HB1943 HD2.

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 HD 2 because the PUC proceeding required by HB1943 HD 2 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.



From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, February 18, 2014 1:10 PM
To: FINTestimony
Cc: mausolarfuture@gmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

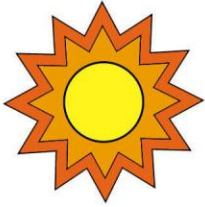
Submitted on: 2/18/2014
 Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

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

Comments: I support this bill because HECO and the PUC have fallen asleep at the wheel. We need legislators to guarantee the public that we will have access to rooftop solar. Many families have to take second jobs just to afford their electric bill. For many, solar is the only relief in sight!

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



INTER-ISLAND SOLAR SUPPLY

Serving Hawaii and the Pacific Islands Since 1975

761 Ahua St., Honolulu, HI 96819
73-5569 Kauhola St., Kailua-Kona, HI 96740
400 Ala Makani St. #103, Kahului, HI 96732

Tel: (808)523-0711 Fax: (808)536-5586
Tel: (808)329-7890 Fax: (808)329-5753
Tel: (808)871-1030 Fax: (808)873-7825

Testimony of Inter-Island Solar Supply
In Support of HB 1943, HD 2
Before the House Committee on Finance
Thursday, February 20, 2014, 1:30 P.M.

Chair Luke, Vice-Chairs Nishimoto and Johanson and members of the Committee, my name is Richard Reed and I am the president of Inter-Island Solar Supply. HB 1943, HD 2 is timely and raises exceedingly important questions. We are in strong support, with comments and recommendations discussed below.

The most important issues for Distributed Generation (DG), or what is often called Rooftop Solar, in Hawaii and elsewhere are: 1) Timely grid accessibility, 2) The fair and equitable allocation of costs associated with the technical upgrades that may be required to accommodate more DG, and 3) The fairness and equity of the NEM proposition for all ratepayers.

It is our position that the final draft of HD 2656, HD 2 should require the PUC to tackle all of these issues simultaneously, with highest priority on the technical and engineering upgrades that allow increased grid access while maintaining system safety and reliability.

There continues to be a perception that DG 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, in the new world of creative solar financing, long-term low interest loans, leases and power purchase agreements provide 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 solar as proposed in HB 2141 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. It is unfair to find inequality in the system and wring our hands if simple solutions such as community solar are at hand.

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 and engineering solutions that will provide increased and continuing DG grid access.

Safe and reliable interconnection for all comers is not, however, a cost free proposition. This docket has the potential to impact customer electric bills as well as utility financial returns. The thorny issue of how costs should be most fairly allocated for the system-wide upgrades needed to accommodate more DG is best left to the Commission.

There are other questions to consider. For example, what DG benefits inure to all ratepayers and how should we value them? This is not simply about costs with no offsetting ratepayer benefits. It is our sense 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 dollars in the state for reinvestment, creates good jobs and expands the tax base. All of these, I would argue, are valuable public benefits that are diminished by less, rather than more, DG and energy efficiency.

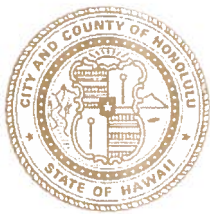
There are some that argue that they receive no direct personal benefit from DG because they live in a high-rise and DG only benefits those that live in single family or low-rise multi-family housing. With the adoption of community based solar (SB 2934) this argument, while specious, becomes irrelevant.

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 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, but the proper venue for this discussion is in the docket proposed by this legislation.

Our primary concern with HB 1943, HD 2 is the protracted time frame allocated for PUC decision making. Without a prompt D & O focused on the technical upgrades that will allow more DG, additional damage will be done to ratepayers and the solar industry. We believe that nine months should provide adequate time to complete this essential piece of the docket. Thank you for the opportunity to provide these comments.



CITY COUNCIL
CITY AND COUNTY OF HONOLULU
530 SOUTH KING STREET, ROOM 202
HONOLULU, HAWAII 96813-3065
TELEPHONE: (808) 768-5010 • FAX: (808) 768-5011

KYMBERLY MARCOS PINE
COUNCILMEMBER, DISTRICT 1
TELEPHONE: (808) 768-5001
EMAIL: kmpine@honolulu.gov

February 19, 2014

House Committee on Finance
Hawai'i State Capitol, Room 306
Honolulu, Hawai'i 96813

Dear Chair Luke, Vice Chair Johanson, Vice Chair Nishimoto, and Members of the Committee:

SUBJECT: Testimony in Support of the Intent of House Bill No. 1943, HD 2

I submit this testimony in **support of the intent** of House Bill No. 1943, HD 2 in my capacity as the Honolulu City Councilmember representing District 1 and NOT on behalf of the Honolulu City Council.

I have been contacted by several 'Ewa constituents who have invested in photovoltaic systems, but are prevented from connecting to the electrical grid until interconnection studies are completed by the electric utility.

For example, one resident of Ocean Pointe in 'Ewa has waited several months to connect their system to the grid and cannot finalize their "net energy metering" agreement with the utility until the interconnection study is complete. Furthermore, this constituent has not received correspondence from the utility since late October 2013.

How do we expect to meet the goals of the Hawai'i Clean Energy Initiative if consumers cannot connect their photovoltaic system to the grid in a safe and timely manner?

House Bill No. 1943, HD 2 is a positive step that will allow the Public Utilities Commission to identify solutions so the consumer can avoid delays, access the grid, and not have to pay for costly and time-consuming interconnection studies.

More importantly, this measure requires the commission to find out why a consumer cannot connect to the grid and what the electric utility is doing to find a solution.

Thank you for the opportunity to provide you with testimony in support of the intent of House Bill No. 1943, HD 2.

Sincerely,

A handwritten signature in black ink that reads "KyMBERLY MARCOS PINE". The signature is written in a cursive style with some capital letters.

KyMBERLY MARCOS PINE
Councilmember, District 1

KMP/js

cc: Senator Mike Gabbard, Chair, Senate Committee on Energy and Environment



HOUSE COMMITTEE ON FINANCE

Thursday, February 20, 2014

**TESTIMONY IN SUPPORT OF HB 1943_HD2 RELATING TO
THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM**

Sarah Bertram, Director, Public Policy, Sunrun

Chair Luke and Members of the Committee:

Thank you for the opportunity to provide testimony in support of HB 1943_HD2.

Sunrun is a leading residential solar company with a national reach. Sunrun has been serving customers in Hawaii since 2010 by partnering with local solar installers. To date, Sunrun has invested more than \$140M to support approximately 4,000 homeowners across the islands in adopting rooftop solar.

Sunrun explains its support for HB 1943_HD2 and suggests one suggested amendment in this testimony.

In the four years since Sunrun entered the market, Sunrun has observed two clear trends:

1. **The total amount of rooftop solar in Hawaii has roughly doubled each year.** As a result of growing consumer demand for home solar, approximately one in ten homes have solar today and many more homeowners want to install solar in the future.

The increasing consumer desire to serve on-site electricity load with rooftop solar is in the public interest. Beyond allowing homeowners to take action to control their utility bills, rooftop solar advances Hawaii's environmental goals and supports thousands of local jobs.

A September 2013 poll conducted by Tulchin research (N=600) shows how consumer demand for rooftop solar shapes the public's policy views: ninety percent of respondents agreed with the statement (including 67% who *strongly* agree) that "we should allow and encourage as many people as we can to install solar power in their homes and businesses to advance the state's clean energy goals." The legislature in Hawaii has a clear history of supporting policies like HB 1943_HD2 that seek to achieve this objective.

2. **The number of customers experiencing considerable uncertainty and/or delays in adopting solar due to utility interconnection challenges has significantly increased.**

The electric grid needs to adapt to serve the needs of modern-day consumers and support the State's renewable energy goals. Although Hawaii has the highest overall level of rooftop solar per capita, nine out of ten homes do not have rooftop solar today. Further, the State is only a quarter of the way to achieving its renewable energy standard of 40% renewable energy by 2030.

Sunrun supports how HB 1943_HD2 responds to these clear trends. Specifically, this bill:

- **Identifies five policy principles for the Commission to address in a grid modernization planning process.** This legislation does not pre-determine any outcomes, and it maintains the Commission's ability to use existing regulatory processes to address technical and economic issues associated with allowing additional rooftop solar in Hawaii.
- **Requires that Commission establish procedural timelines to "expedite the implementation of short-term solutions and minimize delays on customer access to distributed generation."** Thousands of customers have been negatively impacted by HECO's recent rooftop solar policy changes, which have not been substantiated with robust technical rationale or data. Enabling multiple timelines for this proceeding will minimize the likelihood of future disruptions.



- **Specifies a utility reporting process for any distributed generation interconnection applications that are significantly delayed while the grid modernization plan is in development.** This reporting will provide transparency into any technical issues that develop in the interim that impede open rooftops in Hawaii from adopting solar.
- **Makes a general fund appropriation to provide the Commission with sufficient resources to carry out this planning process.** Importantly, HB 1943_HD2 allows the resources commissioned using these funds to be accessed by intervenor parties as necessary and appropriate to support “full and fair stakeholder participation.” Sunrun suggests that the Commission propose a specific amount of funding necessary to support required resources for this proceeding.

Suggested amendment:

In an effort to collaborate with key stakeholders, several parties have been in discussions with the Commission, the Consumer Advocate, and HECO about how to improve this bill. Many of the concepts from those discussions have been adopted in HB 1943_HD2. However, the following language is not consistent with party discussions and could be improved:

Maximize distributed generation interconnections in non-discriminatory terms and at just and reasonable rates, while maintaining reliability of the grid, through applicable rules, orders, and tariffs; (Section 1 (b)(3))

The Commission has proposed the following language in previous bill drafts. Sunrun suggests adopting this language in lieu of the existing clause.

Allowing distributed generation fair and open access to interconnect to the grid at non-discriminatory terms and at just and reasonable rates, and the commission should ensure such access and rates through applicable rules, orders, and tariffs;

Sunrun supports this bill. Thank you for the opportunity to provide this testimony.

Sincerely,
Sarah Bertram



2/20/2014

House Committee on Finance

FIN

1:30 p.m.

TESTIMONY IN SUPPORT

HB 1943

Chair Luke, Vice Chair Johanson, and Members of the Committee:

Hawaii PV Coalition is pleased to submit testimony in **strong support** of HB 1943, HD2, with the recommended changes indicated below.

It is indisputable that Hawaii's residents want solar. This makes sense, given that Hawaii continues to have electricity rates that are more than 3 times the national average. Along with energy conservation, "going solar" is the only way for Hawaii residents to get some relief from their sky-high electric bills. Installing solar also allows Hawaii residents to participate in Hawaii's clean energy goals and help reduce the state's dependence on imported fossil fuels.

Unfortunately, many homeowners are now being prevented from installing photovoltaic solar systems as a result of Hawaiian Electric's interconnection policies. These interconnection policies are in turn the result of aging utility infrastructure designed to support fossil-fuel generation rather than renewable energy.

HB 1943 will help solve this problem by initiating a grid modernization planning process. With a more modern grid, Hawaiian Electric will be able to deliver more stable power, with a higher renewable content to its customers, while at the same time allowing more Hawaii residents to install photovoltaic solar systems. Grid modernization will also allow solar installations to proceed more quickly and without requiring homeowners to pay for elaborate studies or costly grid upgrades.

The Hawaii PV Coalition recommends that this paragraph in the current HD2 version of the bill be modified to follow the PUC's suggested language as indicated below:

~~Allowing Maximizing distributed generation fair and open access to interconnections to the grid at in non-discriminatory terms and at just and reasonable rates, and the commission should ensure such access and rates while maintaining reliability of the grid, through applicable rules, orders, and tariffs;~~

In short, the PUC's language is easier to apply because "fair and open access" has a legal definition and fits within national recommended standards for interconnection.

For these reasons, the Hawaii PV Coalition strongly supports HB 1943, HD2, with the suggested modifications indicated below. Thank you for the opportunity to provide this testimony.

Sincerely,

Mark Duda
President, Hawaii PV Coalition

The Hawaii PV Coalition was formed in 2005 to support the greater use and more rapid diffusion of solar electric applications across the state. Working with business owners, homeowners and local and national stakeholders in the PV industry, the Coalition has been active during the state legislative sessions supporting pro-PV and renewable energy bills and helping inform elected representatives about the benefits of Hawaii-based solar electric applications.



Feb 19, 2014

Hawaii Farmers Union United –
Kona Chapter
P.O. Box 5436
Kailua-Kona HI 96745-5436

Steve Sakala
President

Aloha Chairwomen Luke and Committee Members,

I am writing you today in support of HB1943 in regard to the modernization of the grid here in Hawaii.

Greg Smith
Vice-President

This issue is of vital importance to farmers across the state. Here on the Big Island we pay one of the most expensive electric rates in the country. We are already working hard just to break even and if we get an unexpectedly high electric bill it could mean the difference of profit or no profit for the month or more.

John Giblin Jr.
Vice President

Kurt
Schweickhard
Treasurer

We live in a place with one of the highest amounts of sun hours in our country and thus have the wonderful opportunity to create solar power. It is in our states best interest to support solar innovation and the modernization of our grid. We would also see the benefit of having lower costs to consumers thus leaving them money to spend in our local economy rather than going to a corporation where the profit leaves our state.

Hazel Beck
Secretary

Thank you for hearing this bill and we urge you to support HB 1943.

Kelly Greenwell
Member

Respectfully Submitted,
HAWAII FARMERS UNION UNITED-
KONA CHAPTER

Doug Pittman
Member

Franz Weber
Member

STEVE SAKALA

Steve Sakala
Kona Chapter, President



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

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

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

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

Statement of
RICHARD C. LIM
Director

Department of Business, Economic Development, and Tourism
before the

HOUSE COMMITTEE ON FINANCE

Thursday, February 20, 2014

1:30 p.m.

State Capitol, Conference Room 308

in consideration of

HB 1943, HD 2

RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM.

Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) respectfully offers comments on HB 1943, HD 2, which amends the Public Utilities Commission (PUC) principles regarding advanced grid modernization technology; requires the PUC to initiate a proceeding to address the technical, policy, and economic issues associated with the modernization of Hawaii's electricity grids; requires public utilities and the PUC to file reports; directs the Division of Consumer Advocacy (Consumer Advocate) to represent the interests of all consumers in the course of the proceeding; and appropriates unspecified amounts of general funds to the PUC and Consumer Advocate for the purposes of effectuating this measure.

Through its established energy policy directives, DBEDT supports a diverse portfolio of renewable resources and integrated and modernized grids, all achieved through balancing technical, economic, environmental, and cultural considerations. DBEDT supports further grid analysis and exploring innovative measures to remove barriers to renewable penetration

in the pursuit of a balanced, market-driven, cost-effective energy portfolio that meets and potentially exceeds Hawaii's aggressive clean energy mandates. Because of the dynamic nature of the energy ecosystem and the potential for both short- and long-term innovative solutions for energy supply, transmission, and distribution, DBEDT cautions against being overly prescriptive in this measure, in order to 1) provide adequate flexibility and opportunity for an expeditious and effective regulatory proceeding to enable a solutions-driven approach by appropriate stakeholders to address the technical, policy, and economic issues associated with grid modernization, and 2) ensure that potential solutions to help advance grid modernization and further Hawaii to achieve its clean energy mandates not be unnecessarily limited or delayed by any such legislative proposal or regulatory proceeding.

Due to the need for technical expertise to address grid modernization challenges, which Hawaii is currently at the forefront of, it will be necessary for appropriate resources to be allocated to ensure productive and applicable solutions. DBEDT respectfully defers to the PUC and Consumer Advocate on the regulatory aspects and resources necessary to effectuate this measure.

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



Testimony of Cindy McMillan
The Pacific Resource Partnership

Senate Committee on Finance
Representative Sylvia Luke, Chair
Representative Scott Y. Nishimoto, Vice Chair
Representative Aaron Ling Johanson, Vice Chair

HB 1943, HD2 – Relating to the Modernization of the Hawaii Electric System
Thursday, February 20, 2013
11 a.m.
Conference Room 308

Aloha Chair Luke, Vice Chairs Nishimoto and Johanson, and members of the Committee:

The Pacific Resource Partnership (PRP) is a labor-management consortium representing over 240 signatory contractors and the Hawaii Regional Council of Carpenters.

PRP **strongly supports** HB 1943, HD2, Relating to the Modernization of the Hawaii Electric System, which amends the Public Utilities Commission principles regarding the modernization of the electric grid. This measure requires the commission to initiate a proceeding no later than July 1, 2014, to discuss upgrades to the Hawaii electric system for anticipated growth of customer generation. It also appropriates funds to cover costs of the proceeding.

Thousands of Hawaii residents have taken a step forward toward clean energy and installed renewable power at their homes and/or businesses. This is great news on a number of fronts: it helps make better use of our natural resources so we can meet our state's energy goals, creates thousands of sustainable jobs for the construction industry, and lowers utility costs for individuals who have installed solar rooftop panels or other renewable energy systems.

However, this progress has bumped up against technical limitations that need to be resolved. Because Hawaii is the first state to reach such high levels of renewable energy installation, we are blazing the trail with regard to renewable interconnection with the grid. And it is a grid that was created long ago when renewable energy was not even contemplated. We also know there are financial challenges to incorporating more renewable energy like solar into the electrical grid. Both increased renewable energy interconnection and a strong and healthy utility are in the public's best interest.

February 20, 2014

Testimony supporting HB 1943, HD2 – Relating to the Modernization of the Hawaii Electric System

Page 2

In September 2013, PRP conducted a public opinion poll about solar power. The results were emphatic: 96 percent of voters support getting energy from solar power. This poll shows an extremely strong public will to overcome the challenges and forge policies that will reduce our dependence on dirty imported fuels.

We respectfully ask for your support on HB 1943, HD2. Thank you for the opportunity to share our views on this important initiative with you.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Before the House Committee Finance
Thursday, February 20, 2014, 1:30 p.m., room 308
HB 1943 HD2: Relating to the Modernization of the Hawaii Electrical System

Aloha Chair Luke, Vice-Chairs Nishimoto and Johanson, and members of the House Committee on Finance,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify in support for HB 1943 HD 2, which directs the public utilities commission to open a proceeding by July 1, 2014 to address the technical and economic barriers of interconnection for residential and commercial customers. We also would like to respectfully suggest one amendment. HSEA is a non-profit trade organization that has been advocating for solar energy since 1977, with an emphasis on residential distributed generation and commercial for both solar hot water (SHW) and photovoltaics (PV). We currently represent 81 companies, which employ thousands of local employees working 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 our current grid infrastructure has proved to be inadequate to the task of allowing residential and small commercial customers to install photovoltaics in a timely manner and for a reasonable cost. Although issues of grid access have been ongoing on the Big Island and Maui for the last few years, the industry has slowed significantly after the utility announced new interconnection rules on September 6, 2013.

The September announcement had an immediate impact on customers and the solar industry. In the month of December 2013 alone, there were only 1,140 permits issued on Oahu, a reduction from 1,925 permits issued in 2012, a drop of 40% and the eight straight month of decline compared to the same month in 2012. The reduced number of installations appears to be continuing in 2014, and this stagnation will likely continue until the questions of interconnection availability and costs are adequately addressed.

The utility cites concerns about safety and reliability, and no one questions that safety and reliability is key. However, the issue here is that although the utility had ample notice that grid studies and upgrades were required in order to move forward with our clean energy goals and to support customer's interest in being part of the green energy infrastructure, the utility failed to adequately plan. The installation of PV in the utility's territories had doubled each year since 2008, starting with 471 systems installed through net energy metering in 2008, and growing to almost 40,000 systems today. Yet, the utility is only now conducting needed in the field analyses, the results of which may only produce more questions about grid stability.

In addition to the lost opportunities in reducing our dependence on imported fossil fuels by having more aggregate PV installed across the Hawaiian electric territories, the interconnection slow-down has also resulted in significant loss in tax revenue, both in the form of GET and income tax. Furthermore, the solar industry, which comprises approximately 26% of all of the construction income for the state, has slowed significantly, and this has resulted in the loss of hundreds of jobs—in a time when green energy jobs should be on the rise.

Moreover, in addition to customers facing technical roadblocks, they also face financial uncertainty as they are now required to pay the prorated costs of upgrades, which the utility has yet to determine in most cases. On Maui, for instance, customers are now told that they will pay from \$600 to \$1,600/kW, which

means a cost of \$3,000 to \$8,000 for upgrades, in addition to the cost of the system, plus a wait of 18 months, and 18 months of unanticipated electric bills, making the installation of solar financially out of reach for many. Customers on Oahu, who up until September 6th, 2013, did not pay for prorated upgrade costs if the system was under 10kW, are still waiting to find out how much the cost might be. They expect to hear sometime later this year, and customers on the Big Island face similar roadblocks. And these roadblocks are hitting middle class families struggling to make ends meet and pay the highest electric rates in the nation. A zip code analysis, for instance, for Oahu shows that many of the permits pulled for PV were in middle class neighborhoods.

The impact of inadequate preparation and study of the grid and the application of upgrade costs directly to the customer has hit the state in many ways. First, customers have been frustrated in their goal of installing solar, and even for those who can, they face potentially significant costs to pay for upgrades. A reduction of 40% in pulled permits means a reduction of about 40% in the installation of PV, and this under the deadline of the federal tax credit, due to expire in 2016. In addition, the reduced grid access stands to impact several programs recently adopted such as 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.

This means slower and stalled out progress in reaching our clean energy goals, a continued reliance on imported fossil fuels, lost opportunities for customers to take charge of their bills and invest in the state's infrastructure, a slowed economy, lost jobs, and reduced tax revenues. This also means that Hawaii will burn more fossil fuels than it needs to and pump more greenhouse gases into the atmosphere. An overall 20% reduction in installation of PV in 2013 adds up to an additional 57,897 barrels of oil that will be burned each year for the next 30 years, all of which would have been off-set by self-generation.

HB 1943 HB 2 would address all of these issues by directing the PUC to address the technical, policy, and economic challenges associated with grid modernization to benefit all customers. However, HSEA is concerned that section (b) (3) does not adequately address the issue of allowing interconnection in a timely manner, especially in that some waits are currently opened ended and can take a year or more for interconnection applications to be processed and technical issues to be addressed and resolved. By replacing "maximize" with "fair and open access," the bill makes clear that installations can proceed in a timely manner. This change also prevents a more constricted interpretation of "maximize" which could be taken to mean that limits have been met and "maximized" based upon limited technical criteria. To be clear, HSEA is respectfully suggesting the following amendment:

(b) (3) ~~Maximize~~ Provide fair and open access distributed generation interconnections in non-discriminatory terms at just and reasonable rates, while maintaining reliability of the grid, through applicable rules, orders and tariffs;

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

finance1

From: Charlotte O'Brien <charobrien@gmail.com>
Sent: Wednesday, February 19, 2014 1:09 PM
To: FINTestimony
Subject: HB1943

Hello,

I am a resident of Maui and am very concerned that it is not possible to utilize all of the solar energy given to our islands by Nature.

I understand that we have peak demands that cannot be met by solar energy. But they can be met by solar energy with one of the many new ways to store energy. This can be done simply by pumping water up a hill during sunlight hours and then letting it fall to a turbine or a series of turbines during hours of need. This is only one of many ways to store electricity and it is time that Hawaii gets out of the dirty coal and dirty oil business.

I am in favor of HB1943.

Charlotte OBrien

Charlotte O'Brien

President & CEO

Carbon Drawdown Solutions, Inc.

PO Box 1341, Haiku, HI 96708 USA

Tel. + 1 (808) 344 5339

char@cdsbiochar.com

Skype: soilcarbon or

+ 1 (831) 824 7777



The PUC needs **“Show Cause” authority and tight time line guidance** from the Legislature or Hawaii will stay a victim of the “current” **100% DML Red Herring.**

My name is Ron Hooson. I own Solar Inspectors Hawaii. I perform independent third party inspections for solar contractors and submit them to the City and County of Honolulu to close their permits.

I hold the highest Electrical Licenses offered in Hawaii and four other states dating back over 40 years including the prior Federal tax credit period during the early 1980s. I have watched the Utilities games to stall solar before and we all know what they accomplished back in the 1980s with those tactics.

Hawaii Bleeds Billions of her hard earned dollars every year off shore for oil to generate electricity. HECO on Oahu alone with the current unsubstantiated 100% of Daily Minimum Load barrier stands to perpetuate that off shore blood flow by \$1.5B in 2014 dollars over the life time of just the PV not being installed during the current unsubstantiated 100% DTML barrier.

The grid here demonstrates every day it's ability to handle 100% of the Daily **PEAK** Load, which is several times higher than the DML on most circuits. Alternating Current by definition alternates back and forth in both directions 60 times per second here. The transmission conductors and transformers do not care which direction they carry the current. It can be from any combination of HECO and Solar.

Solar inverters have for decades monitored and control their voltage to fractions of a volt measured in thousandths of a second. HECO measures it's voltage per PUC requirements to increments of 5% (12v) and 10% (24v) measured over several minutes. Solar inverters when they sense voltage fluctuations fail to **Safe** mode and are independent of each other so they switch themselves off in a “soft shut down” relative to the grid thereby providing a stabilizing effect on the grid voltage should an over voltage occur. In an under voltage situation they increase their output in thousandths of a second to help stabilize the grid.

Current data is readily available from HECO's own circuits as well and many other utilities around the world which show that **100% of DML is meaningless**. 200% of Peak Load is the relevant number to monitor. At that level, 100% of peak is absorbed within the circuit and an additional 100% of peak can easily be exported on the grid in the reverse direction as is demonstrated every day by the grid's ability to handle current flow in both directions. Sub station and transformer fuses fully protect the grid in both directions every day whether the flow is from fossil fuels or PV. If Daily Minimum load must be talked about, the number to watch is 300% to 400% depending on the circuit, not 100%.

Any claim relative to a Daily Minimum Load barrier is an unsubstantiated Red Herring designed to miss-use the term 100%. It is akin to saying that walking is 100% of the speed that a human can move. We can also safely run, ride in a car and fly in an airplane. 100% sounds meaningful but it is not in either context.

By HECO's own testimony during the October hearings there are several circuits already well beyond 200% of Daily Minimum Load with out any ill effects. The "current" 100% Red Herring, as was the prior 10%, 15%, 25% and 75% Red Herrings is a stall tactic to hold back as much solar as possible until after the Federal tax credits expire as was done by utility companies across the Nation during the 1980s.

I listened to HECO at the October hearings say, "no, really, trust me this time, we really will have more information on how to add more PV by the end of this week." Here we sit months latter without that new information. Someone needs to be accountable for what is happening and for promises made.

Stopping Hawaii at the very moment that it is finally making real progress on it's path towards **Hawaiians keeping their hard earned money on island** to protect the highest paid executives in the state in their attempt to maintain an obsolete business model of a monopoly on energy while the Federal Tax credit clock is ticking down makes no sense. **The Feds are offering to help Hawaii right now. There is no guarantee that they will in**

the future. HECO is stopping over 50% of the solar from being installed right now with no rational explanation.

Someone needs to be able to say, Show Cause by this date or step aside; we have a job to do. The PUC with firm time line guidance from the Legislature IS THE ANSWER.

Ron Hooson
Solar Inspectors Hawaii
542-6200
Master Electrician
Supervising Electrician
Second Generation Electrical Contractor
Hawaii Licenses ES-9851, C32828, C26929



HOUSE COMMITTEE ON FINANCE

February 20, 2014, 1:30 P.M.

Room 308

(Testimony is 2 pages long)

TESTIMONY IN SUPPORT HB 1943 HD2

Aloha Chair Luke and Finance Committee members:

Blue Planet Foundation strongly supports a robust electrical grid that can connect clean and affordable energy to Hawai'i's citizens and ratepayers. House Bill 1943 will help to ensure that everyone can have access to such a grid, in a timely and reasonable manner. The bill directs the Public Utilities Commission (i) to open a proceeding by July 1, 2014 to address whether there are technical and economic barriers to allowing more residential and commercial customers to interconnect to the grid with clean energy, and (ii) to consider whether the establishment of differentiated rates of return for the utility are warranted to encourage the grid upgrades that are needed to allow equal access to the grid, and to discourage investments in the aging grid infrastructure that blocks access to the grid.

Blue Planet supports HB 1943 HD2, but we suggest one amendment. HD2 presently adds the following paragraph to H.R.S. § 269-145.5(b)(3), instructing the Commission to address grid modernization based on principles including "Maximize distributed generation interconnections in non-discriminatory terms and at just and reasonable rates, while maintaining reliability of the grid, through applicable rules, orders, and tariffs."

Blue Planet believes that the following language, inserted in place of the existing § 145.5(b)(3), will better achieve the principles in HB 1943: "Allowing distributed generation fair and open access to interconnect to the grid at non-discriminatory terms and at just and reasonable rates, and the commission should ensure such access and rates through applicable rules, orders, and tariffs." This language will be easier to apply because "fair and open access" is a defined term and it fits within national recommended standards for interconnection.

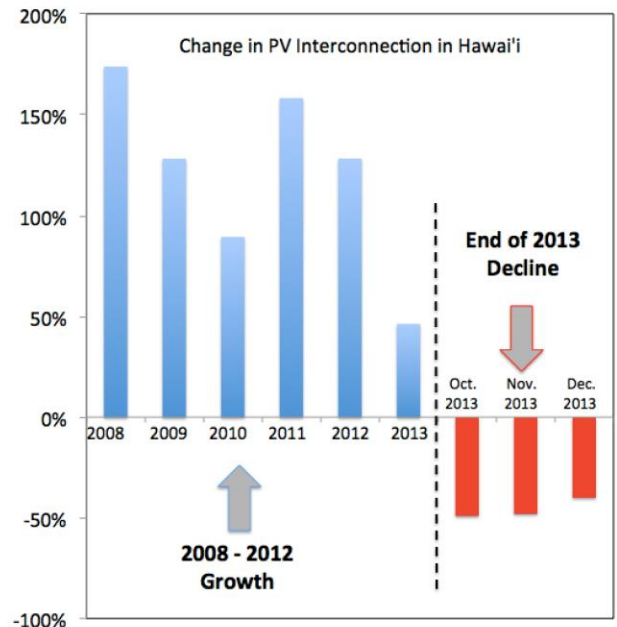
1. Modern Grid Interconnection is Urgently Needed.

This solution cannot wait. At the end of 2013, Hawaii saw a sharp drop in the growth of solar interconnection:

- In October 2013, 1187 fewer ratepayers were issued solar building permits compared to October 2012, a drop of 49%.
- In November 2013, 956 fewer ratepayers interconnected, a drop of 48%.
- In December 2013, 785 fewer ratepayers interconnected, a drop of 41%.

This worrisome stagnation illustrates a sharp change in direction for Hawai'i. Previously, solar installations were essentially doubling each year – an exponential trend that could drive Hawai'i's clean energy transformation. That growth boosted the economy, it created jobs, and it promoted the use of clean energy that does not rely on imported fossil fuels. The current stagnation, if left unaddressed, will do the opposite.

Solar stagnation is already resulting in local layoffs. It will be robbing Hawai'i of potential energy savings. It will prolong our dependence on dirty fossil fuels.



House Bill 1943 can help to make sure that this grid modernization issue is resolved sooner, rather than later.

2. HB 1943 Can Help Ensure Equality for All Ratepayers.

House Bill 1943 can also help ensure that all ratepayers are treated with equal access to clean energy. It is no longer true that solar energy is limited to wealthy neighborhoods. By 2012, the introduction of innovative financing made solar increasingly accessible to all Hawaii ratepayers. For example, in 2012 the fastest growing PV neighborhoods were Wai'anae, Hau'ula, Waimanalo, La'ie, and Waialua.

If the growth of rooftop solar is allowed to stagnate, it means that these growing PV neighborhoods will be unequally and unfairly blocked from clean affordable energy. Moreover, some parties are arguing that new solar customers – presumably in these fast growing lower- and middle-income PV neighborhoods – should be singled out to pay the cost of upgrading the grid to make it work with distributed clean energy. Many ratepayers are already in a holding pattern, under the fear that interconnection will cost thousands of dollars and will take many months. This situation, if allowed to remain, is grossly unfair. As the utility evolves into its 21st century business model, all ratepayers need a grid that is upgraded so that it can flexibly accommodate more clean affordable energy. The cost of a 21st century grid should *not* be

unfairly apportioned to those customers who are least able to afford it, and who are most in need of the rate relief that can be provided by clean energy sources such as solar.

With the language suggested above, House Bill 1943 directs the PUC to revise interconnection procedures to ensure fair and open access to the electrical grid, at a reasonable cost.

3. HB 1943 Can Help Avoid a Costly and Inefficient Fight for Ratepayers.

Recently in Arizona, a highly public fight between the local utility and solar advocates resulted in millions of dollars wasted on publicity campaigns. After review of the facts, the Arizona PUC found that the cost of solar interconnection could be fairly apportioned by charging a small fee to solar customers based on the size of each solar system. Ultimately, this fee will cost solar households in Arizona roughly \$5 per month, to cover the fixed costs of the utility. In comparison, the Arizona utility argued that solar households should pay a grossly higher fee – \$50 per month. Hawai'i's ratepayers don't deserve this type of wasteful fight, and HB 1943 can help to ensure that the issue of fair and open grid access is addressed in a more efficient manner.

Thank you for the opportunity to testify in support of this timely and important solution.



League of Women Voters of Hawaii

49 South Hotel Street, Room 314 | Honolulu, HI 96813

www.lwv-hawaii.com | 808.531.7488 | voters@lwvhawaii.com

COMMITTEE ON FINANCE

Representative Sylvia Luke, Chair
Representative Scott Nishimoto, Vice Chair
Representative Aaron Ling Johanson, Vice Chair

HB1943 RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM

Thursday, February 20, 2014, 1:30 p.m.

TESTIMONY

Nancy Davlantes, Legislative Committee Member, League of Women Voters of Hawaii

Chair Luke, Vice Chairs Nishimoto and Johanson, committee members:

The League of Women Voters of Hawaii, which submitted testimony in support of SB2656, also supports HB1943, HD2. Both bills would require the public utilities commission to adopt rules for improved accessibility to connect to the Hawaii electric system for any person, business, or entity on the Hawaii electric system. It would also require the commission to initiate a proceeding no later than July 1, 2014, to discuss upgrades to the Hawaii electric system for anticipated growth of customer generation.

The League has long supported actions to promote energy conservation and research into alternate energy resources available in Hawaii, taking into consideration environmental effect, economic feasibility, and differing conditions on each island.

While it was gratifying to read that Hawaiian Electric Co. is preparing to issue revised guidelines that will allow more PV systems to be installed in areas on Oahu already saturated with solar panels if the systems meet certain technical specifications, the anticipated continued growth of solar energy in Hawaii demands that the grid be modernized throughout the state so that any individual or business wanting to pursue cleaner and cheaper energy options can do so safely and reliably.

We urge you to pass this bill and thank you for the opportunity to submit testimony.



LEAGUE OF
WOMEN VOTERS®

League of Women Voters of Hawaii

49 South Hotel Street, Room 314 | Honolulu, HI 96813

www.lwv-hawaii.com | 808.531.7488 | voters@lwvhawaii.com

**TESTIMONY BEFORE THE HOUSE COMMITTEE ON
FINANCE**

H.B. NO. 1943, H.D. 2

RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM

February 20, 2014
1:30 pm
House Conference Room 308

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

Chair Luke, Vice Chair Nishimoto, Vice Chair Johanson, 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 HD 2 to open a Public Utilities Commission
review of technical, policy, and economic issues associated with modernization of the
electric grid. However, we cannot support this bill in its current form as it contains
proposed statutory language that would be problematic in its implementation.

First, the proposed language states that modernizing the grid should be based
on a principle that would “enable a diverse portfolio of renewable energy resources
that adheres to customers’ preferences.” We agree that building a diverse portfolio of
renewable energy resources is an appropriate approach to meeting consumers’
energy needs. However, adhering to “customers’ preferences” is not a practical
basis for designing an electrical system, given the diverse interests of our customers
and the technical requirements of operating an electrical system. For example,
different customers will have different renewable energy preferences depending on
such considerations as technology, costs, location, environmental impacts,
opportunities to interconnect, and how costs are allocated.

Second, the proposed language also states that a principle should be to
“maximize distributed generation interconnections in non-discriminatory terms and at
just and reasonable rates, while maintaining reliability of the grid, through applicable
rules, orders and tariffs.” 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 would be taken off the table to allow for customer distributed generation.

Third, the proposed language states that a principle should be to “incorporate customers’ current and forecasted preferences into the utility distribution system.” As explained earlier, building a diverse portfolio of renewable energy resources solely on customer preferences is not practical. Customer preference is an important consideration for energy planning, but it cannot be the only one.

Again, we support the intent of HD 1943 HD 2, 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 SD1 has adopted language that would achieve this purpose. If the Committee chooses to move this bill forward, we respectfully ask that HB 1943 HD 2, be amended to adopt the language of SB 2656 SD1.

Thank you for this opportunity to testify.



Feb 19, 2014

Hawaii Farmers Union United –
Kona Chapter
P.O. Box 5436
Kailua-Kona HI 96745-5436

Steve Sakala
President

Aloha Chairwomen Luke and Committee Members,

I am writing you today in support of HB1943 in regard to the modernization of the grid here in Hawaii.

Greg Smith
Vice-President

This issue is of vital importance to farmers across the state. Here on the Big Island we pay one of the most expensive electric rates in the country. We are already working hard just to break even and if we get an unexpectedly high electric bill it could mean the difference of profit or no profit for the month or more.

John Giblin Jr.
Vice President

Kurt
Schweickhard
Treasurer

We live in a place with one of the highest amounts of sun hours in our country and thus have the wonderful opportunity to create solar power. It is in our states best interest to support solar innovation and the modernization of our grid. We would also see the benefit of having lower costs to consumers thus leaving them money to spend in our local economy rather than going to a corporation where the profit leaves our state.

Hazel Beck
Secretary

Thank you for hearing this bill and we urge you to support HB 1943.

Kelly Greenwell
Member

Respectfully Submitted,
HAWAII FARMERS UNION UNITED-
KONA CHAPTER

Doug Pittman
Member

Franz Weber
Member

STEVE SAKALA

Steve Sakala
Kona Chapter, President

HOUSE COMMITTEE ON FINANCE
Monday, February 20, 2014 — 1:30 p.m. — Room 308

Testimony in Support HB 1943, HD2

Chair Luke, Vice Chair Johanson, and Members of the Committee:

Thank you for the opportunity to provide testimony in support of HB 1943, HD2. RevoluSun is a locally-owned solar company that has sold and installed more than 3,500 residential photovoltaic solar systems in Hawaii. Every day, RevoluSun meets with dozens of Hawaii residents who are interested in helping Hawaii lower its dependence on fossil fuels by purchasing or leasing a solar energy system.

The public's demand for solar in Hawaii is extraordinarily strong. This is largely because Hawaii continues to have electricity rates that are more than 3 times the national average. Along with energy conservation, "going solar" is the only way for Hawaii residents to get some relief from their sky-high electric bills. It also allows Hawaii residents to participate in Hawaii's clean energy goals and help reduce the state's dependence on imported fossil fuels.

Unfortunately, many homeowners are now being prevented from installing photovoltaic solar systems as a result of Hawaiian Electric's interconnection policies. These interconnection policies are in turn the result of aging utility infrastructure designed to support fossil-fuel generation rather than renewable energy.

HB 1943 will help solve this problem by initiating a grid modernization planning process. With a more modern grid, Hawaiian Electric will be able to deliver more stable power, with a higher renewable content to its customers, while at the same time allowing more Hawaii residents to install photovoltaic solar systems. Grid modernization will also allow solar installations to proceed more quickly and without requiring homeowners to pay for elaborate studies or costly grid upgrades.

RevoluSun recommends that this paragraph in the current HD2 version of the bill be modified to follow to revert to the PUC's suggested language as indicated below:

Allowing Maximizing distributed generation fair and open access to interconnections to the grid at in non-discriminatory terms and at just and reasonable rates, and the commission should ensure such access and rates while maintaining reliability of the grid, through applicable rules, orders, and tariffs;

In short, the PUC's language is easier to apply because "fair and open access" has a legal definition and fits within national recommended standards for interconnection.

For these reasons, we **strongly support** HB 1943, HD2 and urge you to pass it with the suggested changes we have recommended above. Thank you for the opportunity to provide this testimony.

Sincerely,

Colin Yost
Principal & General Counsel

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 3:21 PM
To: FINTestimony
Cc: dspitzrealtor@gmail.com
Subject: *Submitted testimony for HB1943 on Feb 20, 2014 13:30PM*

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Danielle Spitz	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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

HOUSE OF REPRESENTATIVES
THE TWENTY-SEVENTH LEGISLATURE
REGULAR SESSION OF 2014

COMMITTEE ON FINANCE

Rep. Sylvia Luke, Chair
Rep. Scott Y. Nishimoto, Vice Chair
Rep. Aaron Ling Johanson, Vice Chair

Rep. Ty J.K. Cullen	Rep. Richard H.K. Onishi
Rep. Mark J. Hashem	Rep. Gregg Takayama
Rep. Kaniela Ing	Rep. James Kunane Tokioka
Rep. Jo Jordan	Rep. Justin H. Woodson
Rep. Bertrand Kobayashi	Rep. Kyle T. Yamashita
Rep. Nicole E. Lowen	Rep. Beth Fukumoto
Rep. Dee Morikawa	Rep. Gene Ward

NOTICE OF HEARING

DATE: Thursday, February 20, 2014, 1:30 pm

PLACE: Conference Room 308
State Capitol, 415 South Beretania Street

TESTIMONY to HB1943 and SB2656

RELATING TO THE MODERNIZATION OF THE HAWAII
ELECTRIC SYSTEM.

EEP, CPC, FIN

Amends the public utilities commission principles regarding the modernization of the electric grid. Requires the commission to initiate a proceeding no later than July 1, 2014, to discuss upgrades to the Hawaii electric system for anticipated growth of customer generation. Appropriates funds to cover costs of the proceeding. Eff. July 1, 2050.

by Ulrich Bonne, ulrichbonne@msn.com, permanent resident of Kailua-Kona, HI 96740, 808-324-0108
Representing: **Self**. Position: **Support, with amendments**. Testify in person: **No**

The purpose of SB 2656 is to facilitate and expedite the availability of grid-tied solar PV for any home or business that wants it, regardless of whether it is self-, publicly- or utility-financed. I SUPPORT that intent, but I believe that additional, more urgent action is needed, than the proposed long time-line, drawn-out PUC studies, their report(s) (20 days before the 2016 session) and uncertain implementation. To better serve the public's interest we have available solutions now, which can be implemented now, such as PV systems which are designed to store excess noon-time energy on-site for use in the evening, rather than inject it into the grid. Such solutions also provide on-site power during grid outages.

One such system is a Low Grid-Load PV system with **Battery Backup** (LGLPVBB), which is grid-tied (to benefit from having the grid as a secondary backup). It does, therefore, not need an on-site engine generator. It meets minimum Self-Consumption* levels, as described in the Appendix, thereby operating in a manner that is similar to the off-grid PVBB systems (especially during grid outages), which many homes have used for over 3 decades in Hawaii and elsewhere. Such on-site storage has lower transmission losses and appears to be of lower cost than more distant utility storage.

Today's utility retail price of mostly over 40 ¢/kWh in Hawaii is heading towards an estimated 30-year-levelized life-cycle cost (LLCC) of over 85 ¢/kWh, while the individual LLCCs for LGLPVBBs are dropping to the 16 ¢/kWh range and plain PVs to the 9 ¢/kWh range (before accounting for the MMC (Minimum Monthly Charge) now equivalent to about 4 ¢/kWh), but including subsidies. Therefore, I believe **SB 2656 and HB1943 should be amended** to specifically and **immediately** (and certainly not delay action to 2016 !):

- (A) Ask the PUC and the utilities to publish accepted and utility-approved, detailed LGLPVBB configurations and guidelines by mid-2014. These are intended for the future benefit of both educating the public and installers as well as reducing the burden of the utilities' permitting process – but should not delay the continued installation of already available LGLPVBBs[2].
- (B) Recognize that the Minimum Monthly Charge (MMC) should be tiered to distinguish between plain PVs (which collectively may cause grid overload), lower MMCs for LGLPVBBs with NEM and FIT contracts

and the lowest MMCs for LGLPVBBs without NEM contracts.

(C) Ask the PUC to report to the legislature

- (1) Why grid-level or individual battery storage has not been requested and deployed as PV installations have grown and have been approved over the past 4-5 years;
- (2) Whether the MMC (Minimum Monthly Charge) has been or should have been designed to cover such storage costs, especially since in Hawaii the MMC is about 4x higher than in other states. A simple analysis shows that a plain average home (w/o PV) 100-150-Amp service connection (and the associated MMC) should cost no more than ~ 1,1 ¢/kWh (or ~5.5 \$/month for an average 500 kWh/month household), to cover capital and maintenance transmission and distribution grid interconnection.
- (3) What a fair MMC should be for a PV without battery backup. A simple analysis with batteries and electronics available today shows that ~20 \$/month should cover such storage, as “caused” and needed by PV systems

(D) Set hook-up or interconnection fees for new homes with LGLPVBBs to be no higher than for new homes without any PVs – provided that the LGLPVBBs meet the minimum Self-Consumption* guidelines detailed in the Appendix, and

Rationale: Because LGLPVBBs cause even much less load on the grid than regular customers without PVs, and certainly much less load than plain PV systems (i.e. PVs without on-site storage), their permitting process should be expedited, their deployment promoted and their low-grid load recognized by means of a lower MMC, which fairly reflects their low grid load. Knowing that grid (transmission and distribution) capital and maintenance expenses amount to about 1 ¢/kWh, a fair MMC for average residential ratepayers using 500 kWh/month may be 5 \$/month[1], regardless of whether explicitly or implicitly included in the retail rate, and regardless of whether any of that energy is used or not at all. However, plain PVs force installation of grid storage, at an added cost of about 5 to 6 ¢/kWh, so that the present MMC of 20.5 \$/month may already cover the added utility expense, as benchmarked against other utilities[1]. I rather pay a little more (~30%) for having electricity storage on-site (as insurance for lighting, refrigeration, irrigation, ... and EV charging) and avoid the effect of grid outages. Remember too (1) The nice feature of a NEM contract: Its kWh credits are independent of the \$/kWh; and (2) To be wary of the flawed notion that more PVBBs cause a need for the utilities to install more spinning reserves: Statistically, the chances of many individual PVBBs to fail simultaneously is much, much smaller than the chance of a single utility generator to fail.

References

- [1] U.Bonne, “Arizona PUC decision to allow a \$0.70/month/kW or about \$5 monthly charge to PV owners,” 19 Nov. 2013, <http://alohafuels.pbworks.com/f/PB-13-MMC.pdf>
- [2] PVBB configurations designed to not inject energy into the grid, such as “PVBB Appliances,” would not require permits, and their 30-year LLCC “penalty” for operating without a NEM contract is less than 2 ¢/kWh, as detailed in ref.[3]
- [3] U.Bonne, “Life-cycle cost of PVBB systems, depending on their grid-tie type,” 1 June 2013, <http://alohafuels.pbworks.com/f/PB-13-PVBB-LCC-Grid.pdf>

APPENDIX

Minimum grid load (and even peak-demand shifting) or maximum PV Self-Consumption* is achieved if:

- (1) The size of the on-site battery is large enough to store the average energy needed for the home or business during the no-sun hours. For Hawaii residents with a solar Capacity Factor near 0.17**, the battery size may range from 2 to 2.5 hours' worth of peak PV output power, for a PV that can provide an average output equivalent to the annual average home load. In locations with half of the above Capacity Factor, a battery size worth 1-1.3 hours may be sufficient to store the peak energy output of a correspondingly larger PV.
- (2) We allow only PV energy and no grid energy to charge the on-site batteries during the day, and
- (3) Grid energy is used for the home or business only if there is no available energy left in the “active” part of the battery
Having monitored my own PV output for the past 4 years in Kailua-Kona at ~ 400-ft elevation, I was surprised but pleased that my day-to-day 2-kW PV output did not fluctuate by more than about +/-50% (peak-to-peak) of the 4-year average of 9 kWh/day. This dispels the concern that little or no output is produced by PVs during cloudy days and might cause a correspondingly inordinate fluctuation on grid demand. I have been able to verify such low peak-to-peak variability at one other location near Waimea, with a much lower capacity factor.

* Self-Consumption = (PV energy used on site) / (Total PV energy generated), which should be > 0.8 for LGLPVBBs

** Capacity Factor = Average fraction of a 24-hour period, during which the PV generates peak output

Thank you for this opportunity to testify.

FIN-Jo

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 1:37 PM
To: FINTestimony
Cc: brucewbooker@hotmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM
Attachments: We deserve the right to enjoy the benefits of roof top solar.docx

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Bruce W. Booker	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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

FIN-Jo

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 12:55 PM
To: FINTestimony
Cc: gary@alohaaku.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mr Gary Passon	Individual	Support	No

Comments: Please support and pass this bill. Lower our rates and bring solar to our communities.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

finance1

From: Paul E. Spencer <sunking@flex.com> on behalf of Sun King Inc.
<sunking@shaka.com>
Sent: Wednesday, February 19, 2014 1:56 PM
To: WAM Testimony
Cc: FINTestimony
Subject: SB2656 and HB1943

As a Maui homeowner, I would like to express my concerns regarding solar electric systems for my property.

In 2010 my electric usage was

I support this bill in the effort to develop Hawaii's sustainable energy policy and overcome the monopoly of public resource held de facto by HECO. Proper infrastructure must be established and energy alternatives must be made affordable and accessible to all. Appropriate legislative oversight is needed to drag HECO to meet its obligation to the public, as the PUC has failed in this as well.

I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the [average residential electricity rates have gone up by more than 50%](#)! People should have the ability to pursue cleaner and cheaper options.

Solar has been a major, sustainable economic engine for Hawaii. [As of 2012, it accounted for 28% of all construction expenditures in the state.](#) HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone.

FIN-Jo

From: Ninu-Alexandri Quirk <naialuna@maui.net>
Sent: Wednesday, February 19, 2014 1:09 PM
To: FINTestimony
Subject: SUPPORT HB 1943

Please SUPPORT HB1943

We have the right to have solar panels on our roofs, whether or not we are hooked up to the grid.

Hawaii needs ENERGY INDEPENDANCE, Solar helps us get it. The elctric company has a monopoly and keeps raising rates, which are already sky high.

When there are earthquakes and tsunamis, people with stand alone solar systems are the only ones who have power during emergencies.

The Solar industry is important to HI's economy and we should support it.

I am testifying as an individual, and I will not be able to come to Honolulu to testify in person.

SUPPORT HB1943

Thanks.

Ninua Quirk,
Hawaii resident

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 3:07 PM
To: FINTestimony
Cc: info@localonlinereservations.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Georgie Pulman-Olzaski	Individual	Support	No

Comments: Everyone should be able to have rooftop solar if they wish. It is clean and efficient, perfect for Hawaii. Our electric bill is ridiculously expensive. Get into the 21st Century HECO, and no policy making behind closed doors!

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

FIN-Jo

From: Bill or Bobbie Best <bestb002@hawaii.rr.com>
Sent: Wednesday, February 19, 2014 1:11 PM
To: FINTestimony
Subject: we support HB1943

We are individuals who will not be testifying in person at the hearing, but want to input:

- We deserve the right to install solar panels on our roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable.
- Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options.
- Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state.
- HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone.

Thank you for considering.

Mr. and Mrs. Bill Best
280 Hauoli St.
Wailuku, HI

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 3:49 PM
To: FINTestimony
Cc: blockard@iname.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Brodie Lockard	Individual	Support	No

Comments: The Public Utilities Commission needs to oversee a fair PV plan that the rest of the country will admire and emulate, not a watered down HECO-friendly one that puts PV installations themselves in peril. My neighbors deserve the right to install solar panels on their roofs without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Hawaii has been leading the nation in PV progress, but now that achievement-- and example--is in jeopardy. Solar has been a major economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

FIN-Jo

From: Steve Canham <swc156@hawaii.rr.com>
Sent: Wednesday, February 19, 2014 1:15 PM
To: FINTestimony
Subject: Support for HB 1943

I write in support of HB 1943. My wife and I are HECO residential customers who were able to install pv and water heating systems prior to the slow down. HECO's constriction of solar installations strikes me as protectionist, obstructionist, and anti-environmental. That HECO did not see the solar wave coming is no excuse for its out of date engineering and outmoded infrastructure. Its inability to plan adequately and to rise to current conditions reveal the problems with "favored" utilities that have no competition. The game has changed, and HECO needs to keep pace and work with alternate energy providers, not try to kill the competition, as recent reports would seem to imply that it is doing. Given global warming and increasing production costs, it is essential that we move away from oil and coal fueled energy production--especially here in the islands, where we have abundant sun and wind, but no, nada, zilch, coal or oil naturally.

Solar development in Hawaii needs better oversight--PUC should have that oversight, not private single for-profit monopolistic utility companies on each island.

Thank you for considering my written testimony; I do not intend to testify in person.

Stephen Canham, PhD
46-156 Nahiku Place
Kaneohe, HI 96744

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 3:48 PM
To: FINTestimony
Cc: sairam2@hawaiiantel.net
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Geoffrey Lasr	Individual	Support	No

Comments: The people in this state demand that you the legislature send strong guidelines to the PUC to determine a Roof Top solar Policy with HECO This fee to be paid is outrageous Rates are Highest in the nation and HECO wants more Be strong think of the people geoff Last

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

FIN-Jo

From: Cinnie Frith <cfrith@fbsmgt.com>
Sent: Wednesday, February 19, 2014 4:13 PM
To: FINTestimony
Subject: Support HB 1943

HECO must start the upgrading of its grid system asap-a process that should have been mandated years ago.

It is foolhardy to encourage the use of solar, and to a lesser degree wind and geothermal, energy in our environment without having the proper/adequate technology in place.

Mahalo,
Cinnie Frith, Kailua-Oahu

finance1

From: Brian Emmons <brimohi@msn.com>
Sent: Wednesday, February 19, 2014 2:44 PM
To: FINTestimony
Subject: HB1943

Honorable Representatives-

Please support HB1943!

I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable.

Aloha, Brian Emmons
1755 Waiola St
Honolulu HI 96826

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 3:40 PM
To: FINTestimony
Cc: ksunny@gmail.com
Subject: *Submitted testimony for HB1943 on Feb 20, 2014 13:30PM*

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Hardeep Kharbanda	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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

FIN-Jo

From: Janice Palma-Glennie <palmtree7@hawaiiantel.net>
Sent: Wednesday, February 19, 2014 1:02 PM
To: FINTestimony
Subject: Support solar expansion

*Support HB 1943
Strengthen SB 2656*

Aloha,

Two grid modernization bills will be heard tomorrow ([SB 2656](#), and [HB 1943](#)). I support HB 1943, which gives the PUC funding to start a grid modernization proceeding and establishes the policy that people can interconnect to the grid (unless there are safety or reliability concerns).

The Senate has weakened the impact of SB 2656 by adopting language recommended by the Public Utilities Commission. For whose benefit?

Instead of giving clear policy direction to support rooftop solar, the current draft of SB 1656 leaves it up to the PUC to decide whether rooftop solar will play a role in Hawai'i's clean energy future. Hawai`I's people support rooftop solar. Why should PUC make decisions about the use and expansion of it, especially behind closed doors?

The people of this state deserve the right to install solar panels on their roofs without interference from the utilities. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. The delays and possible added expense resulting from HECO's neglect are unacceptable. Solar continues to be a major, sustainable economic engine for Hawaii.

Mahalo for your support of expanded, personal use of solar energy — for our future. For our keiki.

Sincerely,
Janice palma-glennie
Kailua-kona

From: Carrie Rautmann <csounding@gmail.com>
Sent: Wednesday, February 19, 2014 6:09 PM
To: FINTestimony; WAM Testimony
Subject: re: SB 2656 and HB 1943 final testimony



- I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable.
- Since 2009, the [average residential electricity rates have gone up by more than 50%](#) ! People should have the ability to pursue cleaner and cheaper options.
- Solar has been a major, sustainable economic engine for Hawaii. [As of 2012, it accounted for 28% of all construction expenditures in the state.](#)
- HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone.
- I am raising a family, and recognize the electric costs in my life time are soaring, what is this next generation going to be faced with, if they are limited to using the grid, and not having the potential to use solar energy. Solar energy represents a more renewable resource, and particularly because we live on Kauai, we have access to the sun. Please listen.

Thank you for considering these!

Carrie Rautmann

LATE

In support of HB 1943

Written Testimony by Mari Ono, Individual

- Hawaii's citizens deserve the right to install solar panels on home rooftops without interference from the utilities company. The delays and possible added expenses resulting from HECO's neglect are unacceptable and unjust.
- Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and more affordable options.
- Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state.
- HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone.
- Creating barriers to developing affordable and environmentally sound solutions to our energy problems is unethical and small thinking. Citizens are well aware of who actually benefits from these stalling tactics...and it ain't the communities or the environment of Hawaii!

Mahalo!

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:58 PM
To: FINTestimony
Cc: jgelert@yahoo.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
John Gelert	Individual	Support	No

Comments: I support the right for more people to use solar panels on their homes.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:51 PM
To: FINTestimony
Cc: mkelley323@gmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mary Lu Kelley	Individual	Comments Only	No

Comments: I support HB1943 to give stronger policy direction to the PUC. •I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. •Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. •Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. •HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. •Provide your own perspective: why is installing solar important to you?

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:45 PM
To: FINTestimony
Cc: mark@marksheehan.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Sheehan	Haiku Aina Permaculture Initiative	Comments Only	No

Comments: We need to modernize the grid. HECO and MECO have made it very hard to install solar and forced us to deal with rising utility costs--up 50% in the past 4 years. Please pass this bill.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:45 PM
To: FINTestimony
Cc: mark@marksheehan.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Sheehan	Haiku Aina Permaculture Initiative	Comments Only	No

Comments: We need to modernize the grid. HECO and MECO have made it very hard to install solar and forced us to deal with rising utility costs--up 50% in the past 4 years. Please pass this bill.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



TESTIMONY SUPPORTING HB 1943, HD2

To: Honorable Sylvia Luke, Chair, House Committee on Finance

From: SolarCity

Hearing on Feb. 20, 2014, at 1:30 p.m., Room 308

Aloha Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee:

Thank you for the opportunity to provide testimony supporting HB 1943, HD2, which initiates a process to modernize our electrical grid.

SolarCity serves homeowners, businesses, not-for-profit organizations, and government entities who want clean energy at a predictable cost. Our operations center in Mililani employs 100 local residents, and our customers and partners in Hawai'i include hundreds of local homeowners, the Hawai'i Department of Transportation, the Maui Arts & Cultural Center, KIUC, HECO, the Ulupono Initiative, the University of Hawai'i, and the U.S. Military.

In the last few years, thousands of Hawaii citizens have "gone solar," securing stable and predictable electricity costs. Yet, only one out of ten households have rooftop solar PV. Today, if you want to join your neighbors who have contributed to our state's effort to reduce consumption of foreign oil, you are in a race against others who want solar or maybe prevented from going solar altogether. Why? Because our investor owned utilities say the grid cannot safely accommodate more distributed generation.

Nine out of ten may be denied the opportunity to get rooftop solar because our 20th century grid has failed to keep up with 21st century innovation.

Without placing blame or speculating on the reason for this lack of foresight, it is clear that we need the support of our lawmakers to ensure that the issues regarding grid stability and distributed generation are considered through an objective process and decided on facts rather than fears and presumptions.

HB 1943, HD2 calls for the Public Utilities Commission to develop a grid modernization plan that will serve the public interest. Significantly, the bill does not predetermine a particular outcome.

Thank you for the opportunity to testify in support of HB 1943, HD2.

Mahalo,

Jon Yoshimura, Director of Policy & Electricity Markets, SolarCity Hawaii

From: Gloria Adams <gloriaadams4@gmail.com>
Sent: Wednesday, February 19, 2014 7:41 PM
To: FINTestimony
Subject: HB 1943

I support HB 1943 because it is taking steps toward Hawaii becoming more energy independent. I hope our legislators take some concrete, timely action with regard to the HECO fiasco relating to rooftop PV installations for utility customers. It is also imperative that our legislators take immediate action to ensure that Hawaii has a "smart grid" in the very near future. It is time for the PUC to have more authority, financial support and specific plans to remedy this long standing problem and ensure that HECO takes responsibility for modernizing the grid.

I, like many others, have been adversely affected by HECO's arbitrary decision to change their interconnection procedures suddenly, without warning, on 9/6/13. I invested many months researching rooftop PV systems, contractors, and suitable finance options in hopes of making the right decision for myself and family. In August I signed a contract with a reputable solar company, made a \$8000.00 deposit, took out a loan for the balance of the cost and anticipated the installation of our system to be completed by late September. Low and behold HECO had other plans for us and many others. After making the financial investment in August I learned of HECO's new requirements for interconnection procedures and found out that HECO would not be approving our NEM application anytime soon because we live in an area with a highly saturated circuit. HECO could not give me any definitive answers as to the timeliness of the required studies or upgrades in order to approve my NEM application. I am now out my deposit, have a monthly loan payment, and still have to pay an exorbitant electric bill.

In November it appeared that there may be light at the end of the tunnel for those of us that could prove that we made a financial commitment with a solar company and/or lending institution prior to 9/6/13. I complied with all the requirements outlined by HECO and learned that my NEM application was eligible for review under the Interconnection Transition Plan. That was more than two months ago, still no approval because the infamous studies and upgrades have not been completed or determined.

Since September HECO has been saying they need to conduct numerous studies, test new technologies to make the grid able to respond more nimbly to changing demands and to store excess green energy, and take other mitigating steps to insure safety and reliability for all. The inter-connection studies should have been done by HECO as part of their routine distribution planning studies. Why has it taken so many months to conduct studies that should have already been done? What has HECO learned from these studies? Why was HECO not prepared for the increased level of PV installation when Hawaii's Clean Energy Initiative was launched back 2008, 5 years ago. Why is it that HECO does not have to comply with any reasonable deadlines to complete their numerous studies and come up with upgrades to their system? In other words, what has HECO accomplished since September other than putting a halt to PV installations across Oahu.

It is in the public's interest that you legislators ask these tough questions and require that HECO take corrective action in an expeditious manner. All residents of Hawaii should have the right to install and the ability to interconnect to the grid regardless of location of their residence. It should not be allowed for just those who had the resources to make the investment prior to 9/6/13.

Hawaii's energy cost have increased nearly 50% in the past 5 years. Solar PV is a way residents can reduce the financial burden of their escalating HECO bills and take care of our environment. Clean energy is important for all generations, however it is particularly important for our aging population who are faced with fixed incomes. It is everyone's kulia to take all reasonable measures available to move Hawaii toward sustainable clean energy independence. As legislators you have the ability to enact laws to ensure that we meet our clean energy goals. You have the ability to hold HECO responsible for their inactions that have severely impacted many residents.

Please support HB 1943.

I am an individual HECO customer that feels we have been overlooked in this whole process. I will not be able to testify at the hearing, but want my written testimony to be considered.

Thank you,
Gloria Adams



I support HB1943 because I agree with the right of individuals to connect their PV units to the grid. I am a renter and therefore cannot take advantage of the savings that accompany PV units, but I support the rights of those who can, if it means that the solar industry will continue to grow and replace fossil fuels. Hawai'i is in a position to lead the country into the future, and our switch to renewable energy must continue if we are to do so.

I understand that HECO is facing real problems, but the discussion must continue with real deadlines and expectations being met by HECO. HECO must show their customers they are working out the problems, not just talking about them, and they will only do this with real pressure. HECO cannot be left to work the problems out by themselves because their action/inaction is affecting too many people.

TESTIMONY OF HERMINA MORITA
CHAIR, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
HOUSE COMMITTEE ON FINANCE



FEBRUARY 20, 2014
1:30 p.m.

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

TITLE: Relating to the Modernization of the Hawaii Electric System

Chair Luke 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 “address technical, policy, and economic issues associated with modernization of the electric grid” based on principles that touch on the diversification of renewable energy resources, but with an emphasis on maximizing distributed generation interconnections, and that have a focus on customer preferences which are to be incorporated into utility distribution system and integrated resource planning. The Commission is also required to commence a regulatory proceeding to “address the technical, policy, and economic issues associated with the modernization of the electric grid in the State, based on the principles in [HRS] section 145.5(b)...” (“Proceeding”). The Proceeding’s scope is defined and multiple procedural timelines for the Proceeding are allowed.

Public utilities are required to file detailed reports with the Commission during the course of the Proceeding on “each customer request to interconnect distributed generation that the utility has denied or has delayed for at least thirty days beyond any applicable deadline in the utility’s interconnection procedures,” with the provision of specific customer and technical information being mandated and made open to the public. Further, the Commission must report its findings and recommendations from the Proceeding prior to the 2016 legislative session, in addition to quarterly interim progress reports to the Legislature being required on the implementation of short-term solutions.

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 the Proceeding. General fund appropriations of unspecified amounts for fiscal year 2014-2015 for the Commission and the Consumer Advocate to carry out and participate in the Proceeding are made. Finally, this measure has an effective date of July 1, 2050.

POSITION:

The Commission opposes this measure and prefers the language offered in the Senate companion, S.B. No. 2656, S.D. 1. A proposed House Draft 3 is attached for the Committee’s consideration. The Commission would also like to offer the following comments.

COMMENTS:

The Commission is concerned that H.B. No. 1943, H.D. 2 does not adequately acknowledge many of the underlying technical, economic, and policy concerns associated with grid modernization. This is particularly true if the scope and issues of the Proceeding solely promote distributed generation at the expense of a diverse resource and technology portfolio and other energy options that may potentially provide greater benefits to both the system and to ratepayers that do not have access to alternative energy resources, but who must continue to rely on the electric utility to provide all or a majority of their electricity requirements.

The Commission recognizes the frustration that has been caused by the Hawaiian Electric Companies’¹ inability to review and accommodate net energy metering (“NEM”) applications in a timely way due to the exponential growth of customer-sited photovoltaic installations. However, the various technical, economic, fairness, and equity issues cannot be overlooked. Therefore, rather than focus on interconnection and customer generation rights, a Proceeding’s key objectives must include the review of an updated regulatory compact that acknowledges customers’ growing energy options, articulating the obligations and responsibilities of an electric utility, as well as the obligations and responsibilities of the customer/generator. Properly designed rate

¹The Hawaiian Electric Companies include Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., and Hawaii Electric Light Company, Inc.

structures to send correct pricing signals that would result in a more competitive market for renewable energy generation and ancillary services for grid support should also be a desired outcome of such a Proceeding.

The Commission believes that the language offered in the attached proposed House Draft 3 is sufficient to give legislative guidance and direction for a Proceeding before the Commission to consider the critical issues concerning modernization of Hawaii's electric grids. Also described below are the specific concerns that the Commission has regarding H.B. No. 1943, H.D. 2.

Specific Concerns

The Commission also points out that some requirements of this measure are unclear. While the Commission does believe that the interests of ratepayers is of paramount importance when discussing the modernization of Hawaii's grids, it is not clear what is meant by requiring that the Proceeding be used to "[i]ncorporate customers' current and forecasted preferences into the utility distribution system and integrated resource planning," as indicated on page 2, line 9 to line 11. The Commission asks: How are "customers' current and forecasted preferences" to be determined? Are these preferences different from those that the Consumer Advocate currently represents in the course of all Commission proceedings, including integrated resource planning? Are these preferences, once determined, to be given a higher priority over other critical concerns, including safety and system reliability concerns? And, perhaps most importantly, is it appropriate to design an electric grid that must serve the needs of all customers on the basis of preferences expressed by those that have a vested interest in those preferences?

Further, this measure would require numerous reports to be produced and filed by both utilities and the Commission, which would further distract the Commission from focusing on finding the regulatory solutions to Hawaii's grid modernization issues that this measure is intended to produce. The Commission would ask the Committee to consider whether this measure's reporting mandates are worth diverting the Commission's limited resources away from many other important energy-focused dockets and programs.² The Commission also notes that it recently issued its decision

²The Commission notes that, as of the date of this hearing, there are a number of bills before the Legislature that would each require added study and reporting by the

approving the Hawaiian Electric Companies' application to waive multiple renewable energy projects from the existing competitive bidding framework in an effort to help encourage more low-cost renewable energy that will broadly benefit ratepayers (Docket No. 2013-0156). Additionally, there are currently open regulatory proceedings and/or programs relating to a review of the Hawaiian Electric Companies' decoupling mechanism (Docket No. 2013-0141); the development of Hawaii's On-bill Financing Program and the implementation of the Green Energy Market Securitization Program created by Act 166, Session Laws of Hawaii 2013; as well as open proceedings regarding integrated resource planning for the Hawaiian Electric Companies (Docket No. 2012-0036) and electric system reliability issues (Docket No. 2011-0206) for which the Commission anticipates near-term determinations.

Thank you for the opportunity to testify on this measure.

Commission on a number of energy-focused issues. For example, these measures include, in addition to this bill, H.B. No. 1543, H.D. 1 (requiring the Commission to study existing NEM contracts with customer generators for the purpose of examining various NEM issues and to report to the Legislature prior to the 2015 legislative session), H.B. No. 1939, H.D. 1 (requiring the Commission to investigate and report prior to the 2015 legislative session on the feasibility of updating and extending the Hawaii Clean Energy Initiative program plans and Hawaii's Renewable Portfolio Standards to include benchmarks beyond 2030), and H.B. No. 2619, H.D. 1 (requiring the Commission to establish energy storage portfolio standards for Hawaii, and, in so doing, analyze currently available and commercially viable energy storage for the State as compared to other non-storage options).

H.B. NO. 1943, H.D.2
[Proposed H.D. 3]

A BILL FOR AN ACT

RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that a modern electrical
2 grid is essential to meeting Hawaii's clean energy goals. In
3 recent years, Hawaii's electric utilities have integrated
4 significant levels of new renewable energy projects on each
5 island grid, and distributed generation in the form of rooftop
6 photovoltaic systems has been the fastest growing share of new
7 renewable energy generation each year. To date, Hawaii's
8 electric utilities are on track to exceed the next renewable
9 portfolio standard goal in 2015. However, moving beyond the
10 current levels of renewable energy on each grid will likely
11 require further investment in advanced grid modernization
12 technology to meet the State's aggressive clean energy goals and
13 maintain a reliable electricity grid.

14 The legislature believes further investments in advanced
15 grid modernization technology may be needed because Hawaii's
16 island grids are reaching significant levels of variable
17 renewable energy that can affect the overall operation of the

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 grid at the system level and the provision of safe and reliable
2 service at the point of delivery to customers. Continued growth
3 in renewable energy, particularly distributed generation, will
4 require investment to modernize the grid to interconnect high
5 levels of distributed generation and support other new customer
6 energy options, such as electric vehicles and demand response
7 technologies.

8 The legislature also finds that the rapid growth of the
9 State's solar industry has reduced Hawaii's dependence on
10 imported oil, created thousands of jobs during a statewide
11 economic downturn, and provided thousands of households and
12 businesses new options to manage their energy bills. The
13 legislature believes a long-term, sustainable solar industry is
14 in the State's interest.

15 The legislature additionally finds that as distributed
16 generation plays an increasingly significant role in the State's
17 clean energy transition the utilities' processes for
18 interconnection and distribution system planning will need to
19 evolve to become more transparent and timely to allow
20 electricity customers to exercise their options to manage energy
21 use. In addition, new rules and tariffs are needed for
22 distributed generation. The current state policies, incentives,

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 rules and tariffs for distributed generation were developed to
2 support a nascent and emerging solar industry. Now that this
3 energy source and industry have achieved significant growth,
4 tariffs for distributed generation need to emerge where
5 customers pay for grid services provided to them and are
6 compensated for the valuable services provided to the grid by
7 distributed generation. These modified tariffs will also set
8 the stage for further technological innovation in this sector as
9 advanced information, PV inverters, and energy storage systems
10 will expand the nature of services offered by customer-sited
11 resources to the grid.

12 The legislature also finds that the resolution of the
13 matters noted in this measure require detailed discussion of
14 technical, policy, and economic issues associated with the
15 modernization of Hawaii's island grids that are best
16 accomplished in a regulatory proceeding by the public utilities
17 commission to ensure fairness, equity, and just and reasonable
18 rates.

19 To help accomplish this regulatory proceeding in a timely
20 manner, the legislature provides further policy guidance in
21 conjunction with section 269-145.5 concerning advanced grid
22 modernization technology.

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 Future investment and planning to modernize Hawaii's
2 electric grids cost-effectively should: (1) enable a diverse
3 portfolio of renewable energy resources; (2) expand options for
4 customers to manage their energy use; (3) allow distributed
5 generation fair and open access to interconnect to the grid at
6 non-discriminatory terms and just and reasonable rates, and the
7 commission should ensure such access and rates through
8 applicable rules, orders, and tariffs; and (4) provide fair
9 payment for grid services provided to customers and fairly
10 compensate customers for valuable services provided to the grid
11 by distributed generation.

12 It is the legislature's intent that the public utilities
13 commission open a proceeding by July 1, 2014 to address the
14 technical, policy, and economic issues associated with
15 modernization of Hawaii's electricity grids.

16 The legislature requests that the commission complete the
17 proceeding and submit a final report on the results of the
18 proceeding to the legislature no later than twenty days prior to
19 the convening of the regular session of 2016. The legislature
20 also requests that the public utilities commission identify and
21 establish an interim timeline for resolving short-term, high-
22 priority issues associated with grid modernization. For issues

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 that require further in-depth analysis and discussion by the
2 parties, the commission would establish a longer timeline for
3 resolution and reporting under this proceeding.

4 SECTION 2. (a) The public utilities commission shall
5 commence a proceeding by July 1, 2014, to address the technical,
6 policy, and economic issues associated with the modernization of
7 Hawaii's electricity grid and shall take into consideration the
8 following:

- 9 (1) Development of a diverse portfolio of renewable energy
10 resources;
- 11 (2) Expanded options for customers to manage their energy
12 use;
- 13 (3) The manner in which distributed generation shall be
14 allowed access to grid interconnection without
15 discriminatory terms, with fair and reasonable rates;
16 and
- 17 (4) Providing fair payment for grid services provided to
18 customers and fair compensation to customers for
19 services provided to the grid by distributed
20 generation.

21 The commission shall ensure such access and rates through
22 applicable rules, orders, and tariffs. The commission

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 proceeding required under this subsection may encompass one or
2 more procedural timelines, as determined necessary and
3 appropriate by the commission.

4 (b) The commission shall submit a report of its findings
5 and recommendations to the legislature no later than twenty days
6 prior to the convening of the regular session of 2016.

7 (c) The commission and the division of consumer advocacy
8 within the department of commerce and consumer affairs shall be
9 exempt from section 103D-304, Hawaii Revised Statutes, in its
10 procurement of any professional services needed to conduct the
11 proceeding.

12 SECTION 3. There is appropriated out of the general
13 revenues of the State of Hawaii the sum of \$750,000 or so much
14 thereof as may be necessary for fiscal year 2014-2015 for the
15 public utilities commission to conduct a proceeding pursuant to
16 section 2 of this Act.

17 The sum appropriated shall be expended by the public
18 utilities commission for the purposes of this Act.

19 SECTION 4. There is appropriated out of the general
20 revenues of the State of Hawaii the sum of \$750,000 or so much
21 thereof as may be necessary for fiscal year 2014-2015 for the
22 division of consumer advocacy within the department of commerce

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 and consumer affairs to represent the interests of all consumers
2 in accordance with section 269-51, Hawaii Revised Statutes, in
3 the course of the proceeding pursuant to section 2 of this Act.

4 The sum appropriated shall be expended by the division of
5 consumer advocacy within the department of commerce and consumer
6 affairs for the purposes of this Act.

7 SECTION 5. This Act shall take effect on July 1, 2014.

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

Report Title:

Grid Modernization; Hawaii Electric System; Public Utilities Commission; Division of Consumer Advocacy; Appropriation

Description:

Requires the public utilities commission to initiate a proceeding no later than July 1, 2014, to address the technical, policy, and economic issues associated with the modernization of Hawaii's electricity grids. Requires the division of consumer advocacy to represent the interests of all consumers at the proceeding. Appropriates funds to the commission and division of consumer advocacy. Takes effect 7/1/2014.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 9:14 PM
To: FINTestimony
Cc: mpshaw10@gmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Shaw	Individual	Comments Only	No

Comments: I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. I have an existing 2kw solar voltaic system and wish to expand it with another 2kw, but I'm told my area cannot have any more new solar voltaics without a study that would cost more than the new system. This is crazy!

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



HOUSE COMMITTEE ON FINANCE

February 20, 2014, 1:30 P.M.
(*Testimony is 3 pages long*)

LATE

TESTIMONY IN SUPPORT OF HB 1943 HD2

Aloha Chair Luke and Members of the Committee:

The Sierra Club of Hawai'i, with over 12,000 dues paying members and supporters statewide, ***strongly supports*** HB 1943. This measure prioritizes the development of a grid modernization plan so that residents have the right to choose clean, renewable energy.

I. Addressing Customer Need

Melba Amaral, a Faith Action for Community Equity volunteer, recently wrote a story for the Sierra Club's Hawaii Solar Voice's website.¹ She runs a small day care facility for toddlers. She has an electric bill of about \$400 a month. She's fairly good at minimizing her electricity usage. She unplugs her cable box every night. She uses a clothesline.

Her only "luxury" is a single window air conditioner that she uses to make sure her Kalihi house doesn't become too hot for her toddlers. Ms. Amaral could benefit tremendously from rooftop solar. She's doing all of the right things to reduce her electric bill, but no other relief is in sight. And yet, under the current situation, she's denied the opportunity to generate her own electricity and help the state out with its clean energy goals.

This measure would help protect Ms. Amaral's right to choose rooftop solar. As you consider this measure, please consider Ms. Amaral's plight and thousands of other residents that are in a similar situation. Hawaii's electrical rates are currently 2 to 3 times the national average. Average electrical rates have increased by 50% since 2009. Our electrical distribution system should be designed to service all customers, even those that may choose to generate their own electricity, and in a manner that results in a net cost savings for all ratepayers.

¹ <http://www.hawaiisolarvoices.org/1/post/2013/11/i-need-solar-on-my-roof-and-heco-off-my-back.html>

II. *The Need to Integrate More Rooftop Solar*

Hawai'i continues to be one of the most fossil fuel dependent states in the nation. Every year, the state imports approximately 45 million barrels of oil. This dependence results in the outflow of the State's financial resources and creates a tenuous reliance on an unsustainable and unstable resource.

Distributed solar is a shining success story in Hawai'i's efforts to adopt clean energy. As reported by DBEDT, solar energy provided 15% of Hawai'i's renewable energy generation in 2012 and 26% of all construction expenditures.² That bears repeating. 26% of all construction expenditures or approximately a quarter of all construction jobs created in Hawaii came out of the solar industry. Failing to allow customers to choose rooftop solar puts this growth in serious jeopardy.

Even HECO acknowledges we need to achieve "uniform, timely, and unfettered access for all customers to interconnect on a given circuit."³

III. *Benefits of a Modern, Efficient Grid*

The benefits of transforming from a 19th century oil-based grid, to a modern, efficient grid are numerous. Consider:

- **Reliability and consistency.** Improved power quality resulting in economic and productivity gains.
- **Efficiency.** Effective asset utilization and resource management.
- **Flexibility.** Enables new load management, distributed generation, and demand-response options.
- **Environmentally friendly.** Directly increases the amount of renewable energy and energy efficiency options available, and allows a drastic reduction in fossil fuel consumption.

IV. *PUC Has Discretion to Address Broader Technical and Economic Issues*

Importantly, this measure does not pre-determine how solar can or should interconnect. It expressly ensures that the PUC has control over reliability and safety issues and allocates resources so that the PUC can develop a grid modernization plan that supports the public interest of allowing customers to interconnect rooftop solar in a timely and reasonable manner.

² http://energy.hawaii.gov/wp-content/uploads/2011/10/FF_June2013_R2.pdf

³ 2013 Integrated Resources Planning Report, June 28, 2013, page ES-6. Available online at: http://www.hawaiianelectric.com/vcmcontent/IntegratedResource/IRP/PDF/IRP_2013_Report-Executive-Summary-Transmittal-Letter.pdf

V. PROPOSED AMENDMENTS:

On page 2, lines 1-4, the PUC recommended different language. Specifically that distributed generation shall have “fair and open access,” to the grid. This term well-interpreted nationally and has context in the energy arena. We suspect this language will be easier to understand and apply, in comparison to what is currently in HD2.

Page 2, lines 1-4:

- (3) ~~Maximize distributed generation interconnections in non-discriminatory terms and at just and reasonable rates, while maintaining reliability of the grid, through applicable rules, orders, and tariffs;~~
Allow distributed generation fair and open access to interconnect to the grid at non-discriminatory terms and at just and reasonable rates, and the commission should ensure such access and rates through applicable rules, orders, and tariffs; and

Mahalo for the opportunity to testify.

finance8-Danyl

LATE

From: Robert Watkins <doc.watkins@me.com>
Sent: Wednesday, February 19, 2014 9:26 PM
To: FINTestimony
Subject: HB1943

It's so important for Hawaii residents to be able to net meter, to help the earth by burning less fossil fuels and to reduce our electric bills.

Sent from my iPad

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 9:37 PM
To: FINTestimony
Cc: bobwrigley@aol.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Wrigley	Individual	Comments Only	No

Comments: The people should be able to put renewable solar energy panels on their roof to lower the cost of their energy and not be refused by HECO. HECO should be an enabler and not an obstacle.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: Tlaloc Tokuda <tlalocct@hotmail.com>
Sent: Wednesday, February 19, 2014 10:54 PM
To: WAM Testimony; FINTestimony
Subject: FW: SB 2656 & HB 1943

LATE

From: tlalocct@hotmail.com
To: taksu2004@yahoo.com
Subject: SB 2656 & HB 1943
Date: Thu, 20 Feb 2014 08:21:18 +0000

Dear Senators and Reps,

I am passionate about solar/sustainable energy and have been a critic of HELCO since the 70's...I actually worked on the Hawaii Home Energy Book, which assisted homeowners in designing passive solar houses and later worked on materials (UH under Dr Jim Harpstrite) on renewable energy for high school students...I submit this as an individual and i am in support of SB 2656 & HB 1943. though SB 2656 was weakened when the Senate adopted language recommended by the PUC that would let them set the deadline for fixing the grid, instead of ensuring legislative oversight. The has shown us time and again that they are hopeless at setting or keeping deadlines, so both houses should pass SB 2656 & HB 1943 that strengthening and give stronger policy direction to the PUC. I will not attend the hearinig.

I should have the right to install PVs on my roof, my brother who lives in Kona tried to add 15 more PV panels to his roof but was denied due to HELCO rules and regs...i am appalled to learn that in the past 5 years average residential electricity rates have gone up more than 50%. Solar (mostly PVs but also thermal) has been a major sustainable economic engine for Hawaii; as of 2012 it accounted for 28% if all construction expediture in the state. But HELCO has repeatedly failed to demonstrate a plan to facilitate rooftop PVs. The PUC needs to concretely set an operational plan that allows for massive PV extension and expansion which is fair and efficient to everyone. So please Reps and Senators deliver SB 2656 & HB 1943 that will really assist the people of Hawaii instead of give HELCO cart blanche to screw over rate payers and make the PUC into a true PUC to serve the people of Hawaii.

Mahalo,
Tlaloc Tokuda
73-4599 Kukuki St
Kailua Kona , HI 96740

I would like a responds to those voting against either bill as to their reason and rationale.



From: Pete Wilson <perhansahi@gmail.com>
Sent: Wednesday, February 19, 2014 11:06 PM
To: FINTestimony
Subject: in support of HB 1943

I am an individual who lives in Leilani Estates, a development on the Big Island, I am building a home there upon which I want to place a photo voltaic system. I first learned how inept and antiquated HELCO is first hand when I got my temporary. I had to call my electrical contractor to light a fire under the management since they had lost my paperwork and my \$550 “contribution” (that’s what they called my fee to start my experience with HELCO) and were 3 weeks over the length of time that they said it would take to setup my temporary attachment to the Hawaiian grid. When I finally got my connection I was amazed to discover that the digital meter that was attached to the temporary doesn’t have wifi capability and can not communicate through the grid with the main. So HELCO doesn’t use wifi capable meters so they have to use more manpower to read the meters. That makes electricity cost more.

I live not 1 and a half miles from Puna Geothermal Venture and I am completely in favor of the expansion of geothermal energy on the Big Island and elsewhere in Hawaii. But the grid that comes out of PUNA is pathetic. HELCO seems to have a consistent policy to exist in a framework that is reminiscent of the zeitgeist of the 1950’s. We are in the 21st century with global climate change a proven theory and we should be taking proactive steps to make a difference.

HELCO as a public utility must respond to the needs of the government (i.e. the people) not the shareholders. I deserve the right to install solar panels on my roof without interference unless there are safety or reliability concerns from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50% according to PUBLIC UTILITIES COMMISSION STATE OF HAWAII ANNUAL REPORT (HAW. REV. STAT. § 269-5) FISCAL YEAR 2011-12. People should have the ability to pursue cleaner and cheaper options than the misguided management of HELCO can see. Since solar has been a major, sustainable economic engine for Hawaii, as of 2012, it accounted for 28% of all construction expenditures in the state according to the State of Hawaii Energy Resources Coordinator’s Annual Report for 2013. It seems that this would be a win win for the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. I will not be testifying in person at the hearing. But I want to emphasize my support of HB 1943

Sincerely,

Pete Wilson

13-927 Kahukai Street

Pahoa, HI 96778



From: Harvey Arkin <alohaxtc@hawaii.rr.com>
Sent: Wednesday, February 19, 2014 11:39 PM
To: FINTestimony
Subject: HB 1943

HB 1943

- I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable.
- Since 2009, the [average residential electricity rates have gone up by more than 50%](#)! People should have the ability to pursue cleaner and cheaper options.
- Solar has been a major, sustainable economic engine for Hawaii. [As of 2012, it accounted for 28% of all construction expenditures in the state.](#)
- HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone.

Harvey Arkin
3349 Anoa'i Pl
Honolulu, HI 96822
alohaxtc@hawaii.rr.com

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, February 20, 2014 9:18 AM
To: FINTestimony
Cc: wao-hsl@WeAreOne.cc
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	Individual	Support	No

Comments: I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. I support strengthening SB 2656 to give stronger policy direction to the PUC. There is no rational reason to pollute our own environment or destroy ecosystems. www.WeAreOne.cc

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



From: mailinglist@capitol.hawaii.gov
 Sent: Thursday, February 20, 2014 9:33 AM
 To: FINTestimony
 Cc: alan.lennard.808@gmail.com
 Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Alan Lennard	Individual	Support	No

Comments: I am in Support of bill HB 1943. I am testifying on behalf of myself . I believe that all solar customers deserve the right to install solar panels on their home roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. All of the people I know who are currently seeking to install pv on their homes are feeling significant anxiety due to the HECO LVM process. The process was initiated arbitrarily without adequate warning to potential customers and installers and then baby-step solutions were instituted which only performed band-aid remedies. The Hawai'i solar customers deserve much more recognition and HECO has plenty of evidence to support the fact that grid instability will not occur at the current levels. Thank you Alan Lennard

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 6:28 PM
To: FINTestimony
Cc: shannonkona@gmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Rudolph	Individual	Support	No

Comments: Support.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



LATE

TESTIMONY SUPPORTING HB 1943, HD2

To: Honorable Sylvia Luke, Chair, House Committee on Finance

From: SolarCity

Hearing on Feb. 20, 2014, at 1:30 p.m., Room 308

Aloha Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee:

Thank you for the opportunity to provide testimony supporting HB 1943, HD2, which initiates a process to modernize our electrical grid.

SolarCity serves homeowners, businesses, not-for-profit organizations, and government entities who want clean energy at a predictable cost. Our operations center in Mililani employs 100 local residents, and our customers and partners in Hawai'i include hundreds of local homeowners, the Hawai'i Department of Transportation, the Maui Arts & Cultural Center, KIUC, HECO, the Ulupono Initiative, the University of Hawai'i, and the U.S. Military.

In the last few years, thousands of Hawaii citizens have "gone solar," securing stable and predictable electricity costs. Yet, only one out of ten households have rooftop solar PV. Today, if you want to join your neighbors who have contributed to our state's effort to reduce consumption of foreign oil, you are in a race against others who want solar or maybe prevented from going solar altogether. Why? Because our investor owned utilities say the grid cannot safely accommodate more distributed generation.

Nine out of ten may be denied the opportunity to get rooftop solar because our 20th century grid has failed to keep up with 21st century innovation.

Without placing blame or speculating on the reason for this lack of foresight, it is clear that we need the support of our lawmakers to ensure that the issues regarding grid stability and distributed generation are considered through an objective process and decided on facts rather than fears and presumptions.

HB 1943, HD2 calls for the Public Utilities Commission to develop a grid modernization plan that will serve the public interest. Significantly, the bill does not predetermine a particular outcome.

Thank you for the opportunity to testify in support of HB 1943, HD2.

Mahalo,

Jon Yoshimura, Director of Policy & Electricity Markets, SolarCity Hawaii

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:43 PM
To: FINTestimony
Cc: mendezj@hawaii.edu
Subject: *Submitted testimony for HB1943 on Feb 20, 2014 13:30PM*

LATE

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 5:12 PM
To: FINTestimony
Cc: kpterra@gmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Kelly Pomeroy	Individual	Support	No

Comments: It would be unconscionable for Hawaii not to maximize its use of solar energy...especially since we have so much of it, and we will be so strongly impacted by sea level rise and ocean acidification.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:45 PM
To: FINTestimony
Cc: mark@marksheehan.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Sheehan	Haiku Aina Permaculture Initiative	Comments Only	No

Comments: We need to modernize the grid. HECO and MECO have made it very hard to install solar and forced us to deal with rising utility costs--up 50% in the past 4 years. Please pass this bill.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



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
HOUSE COMMITTEE ON FINANCE

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

February 20, 2014

Chair Luke, Vice-Chairs Nishimoto and Johanson 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 are to: (i) amend the public utilities commission principles regarding the modernization of the electric grid; (ii) require the commission to initiate a proceeding no later than July 1, 2014, to discuss upgrades to the Hawaii electric system for anticipated growth of customer generation; and (iii) appropriate funds to cover costs of the proceeding.

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

- 1) Comments. Clearly, this measure supports our clean energy goals. Its intent is also clear regarding modernization of our electric grids (lines 4 to 10, p.1), without which, in our opinion, it will be difficult to integrate the level of renewables needed to meet our clean energy goals:
 - a) However, we do not see how the intent can be accomplished if the focus of this measure is, as is currently drafted, on distributed generation.
 - b) Thus, we 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 with an amendment to broaden its scope to include all renewable generation.

Mahalo for this opportunity to testify.

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 7:25 PM
To: FINTestimony
Cc: kaloli.pt@gmail.com
Subject: *Submitted testimony for HB1943 on Feb 20, 2014 13:30PM*



HB1943

Submitted on: 2/19/2014

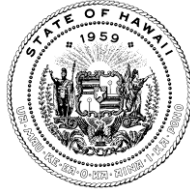
Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Ann Strong	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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



NEIL ABERCROMBIE
GOVERNOR

SHAN S. TSUTSUI
LT. GOVERNOR

STATE OF HAWAII
OFFICE OF THE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

335 MERCHANT STREET, ROOM 310
P.O. Box 541
HONOLULU, HAWAII 96809
Phone Number: 586-2850
Fax Number: 586-2856
www.hawaii.gov/dcca

KEALI'I S. LOPEZ
DIRECTOR

JO ANN M. UCHIDA TAKEUCHI
DEPUTY DIRECTOR

TO THE HOUSE COMMITTEE ON
FINANCE

THE TWENTY-SEVENTH LEGISLATURE
REGULAR SESSION OF 2014

THURSDAY, FEBRUARY 20, 2014
1:30 P.M.

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

HOUSE BILL NO. 1943 H.D.2 - RELATING TO THE MODERNIZATION
OF THE HAWAII ELECTRIC SYSTEM

DESCRIPTION:

This measure proposes to require the Public Utilities Commission to amend its principles regarding modernization of the electric grid. It also requires the Commission to initiate a proceeding no later than July 1, 2014, to discuss upgrades to the Hawaii electric system for anticipated growth of customer generation.

POSITION:

The Division of Consumer Advocacy supports the intent of this measure with comments.

COMMENTS:

The Consumer Advocate is aware of the number of technical issues that are arising due to the current state of the electric grids in the Hawaiian Islands. The current electric grids are unable to accommodate all of the individuals and businesses that are interested in interconnecting distributed generation systems, more commonly known as photovoltaic systems or PV systems, without some delay, additional studies, and/or costs. The current electric grids also constrain the ability to add larger renewable energy projects as well.

The Consumer Advocate has concerns; however, with some of the proposed provisions in H.D. 2. In proposed Hawaii Revised Statutes Section 269-145.5, H.D. 2 provides that, "The commission shall address technical, policy, and economic issues associated with modernization of the electric grid, based on the following principles:"

(5) Incorporate customers' current and forecasted preferences into the utility distribution system and integrated resource planning.

This provision is vague and ambiguous as to what is meant by "customer preferences" and how these preferences are to be measured and determined. If this is meant to be a reference to distributed generation, then the previous paragraphs adequately address distributed generation as a principle to be studied as part of modernizing the electric grid.

The issue of how the grid should be upgraded and the evaluation of the costs associated with such upgrades are expected to be analyzed in the recommended actions identified by the final report filed by the independent facilitator in Docket No. 2011-0206, which was the Commission's Reliability Standards Working Group proceeding. Until those actions have been completed, the proposed measure may be premature.

The Consumer Advocate and the Public Utilities Commission are currently working with a number of stakeholders on revising the parallel Senate version of this bill, S.B. No. 2656. The Consumer Advocate recommends deferral of this bill to allow the parties time to come to a mutually agreed upon draft that can be presented to both the House and the Senate.

Thank you for this opportunity to testify.

LATE

My name is William Walker and I am a resident of Ewa Beach that installed a \$35,000.00 PV system at my residence in October 2013. Shortly after the installation of my system I became aware of HECO's new NEM / grid interconnectivity policy. HECO now requires that a NEM agreement be submitted and approved prior to the installation of the system which is exactly the opposite of the former process where the NEM agreement was the final step. HECO has determined the circuit in my neighborhood is above maximum saturation, which may require further studies and improvement before I can connect.

In late November 2013, I received a letter from HECO stating that my system met their new guidelines which they had established for those of us who were "in limbo" and we would be "grandfathered" into the system without any additional costs for studies or grid upgrade fees. In mid January 2014 I received another letter from HECO, which stated that despite the promise to be grandfathered into the system HECO could not approve me because of the saturation of level of my circuit.

HECO and HECO alone has created this "problem" and every time they propose a short term solution, they eventually go back on their word citing safety and reliability concerns. My PV system has been up for four months and HECO has not given me a timeline for when their "studies" or "upgrades" are going to be started, conducted, completed, etc.

I've had many sleepless nights and experienced a great amount of unnecessary stress due to HECO's actions.

I do not trust HECO and have no faith in their ability to make improvements to the grid on their own, which is why I support HB 1943.

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, February 20, 2014 7:10 AM
To: FINTestimony
Cc: cdbevis@yahoo.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Carol Bevis	Individual	Support	No

Comments: Please help the islands become SUSTAINABLE once again. Please support alternative energy research and implementation. AND: * I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. * Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. * Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. * HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. KIUC also needs to work with alternative sources and get rid of "smart meters". My 20 yr. old nephew has cancer. How many have to suffer and die before we realize we are contaminating our OWN HABITAT? Aloha!

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

Anthony Aalto
3946 Lurline Drive • Honolulu, Hawai'i 96816
808.234.9779

Committee on Finance
February 20, 2014 1:30pm

Testimony in support of HB 1943

RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM

Aloha Chair Luke and Members of the Committee,

Thank you for this opportunity to testify. I do so as a frustrated HECO customer who would like to install a PV system on my roof, but have been denied the opportunity because I live in a so-called saturated zone.

From my research I believe that HECO is overstating the safety issue. There has been no case anywhere in Hawaii of "overload backflow", indeed I note that representatives of the manufacturers of the panels and inverters have testified that their equipment can detect such a problem and mitigate it. The lack of a true technical standard is why HECO keeps moving the goalposts and raising the amount of rooftop solar power it is prepared to accept. This makes clear that the issue is being used as a smokescreen.

I believe HECO is playing for time – delaying individual rooftop solar while trying to modernize its own generating capacity in the hope of holding on to its customers by regulatory fiat.

It is for this reason that I urge you to replace this paragraph:

Maximize distributed generation interconnections in non-discriminatory terms and at just and reasonable rates, while maintaining reliability of the grid, through applicable rules, orders, and tariffs;

With the PUC's original language of:

Allowing distributed generation fair and open access to interconnect to the grid at non-discriminatory terms and at just and reasonable rates, and the commission should ensure such access and rates through applicable rules, orders, and tariffs;

We taxpayers are your constituents and we need your help to ensure that HECO does not treat us as hostages who can be bullied into buying the monopoly utility's power when we want to generate our own.

I wish to testify concerning House Bill 1943. I support HB1943, and I will not be coming to the hearing in person.

It is clear to me that home-based solar electricity is the best way to provide energy for our personal lives. As technology improves, we will reach an ideal condition where every home is self-sufficient. Businesses will have their own solar power systems. There will be no need for a power grid. As we transition into that state, the existing power grid is a backup system that is available at night, while solar power is available during the day.

There is no good reason to burn fossil fuels for electrical power. This is an obsolete technology that is contributing to global warming, which could make life on our islands almost unbearable. We can understand HECO's interest in self-preservation, but it is not in our interest. We need to transition to solar electricity with all possible haste, not only in Hawaii but worldwide. Locally, this means that we can allow no more foot-dragging by HECO and the PUC.

If HECO will not cooperate with the transition, homeowners will go to battery backup systems, which will make HECO irrelevant that much faster. It is past time to update the power grid to make the transition to solar power smoothly.

LATE

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 10:06 PM
To: FINTestimony
Cc: arbeit@hawaiiantel.net
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Wendy Arbeit	Individual	Support	No

Comments: HECO doesn't care about energy conservation, only profits. It should not be allowed to continue to infringe on the people's right and ability to install solar... and in a timely manner.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 9:45 PM
To: FINTestimony
Cc: davidsher@juno.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

LATE

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Support	No

Comments: Aloha I strongly urge you to support this bill. People deserve the right to install solar panels without interference from the utilities. HECO has repeatedly failed to demonstrate a plan for growth of innovative technologies. The PUC needs to chart a way forward on grid modernization that is fair and efficient for everyone.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

LATE

From: Daniel Benedict <stlukebysea@yahoo.com>
Sent: Thursday, February 20, 2014 7:02 AM
To: FINTestimony
Subject: Testimony in support and strengthening HB 1943

Testimony in support of HB 1943

My name is Daniel Benedict and I submit testimony in support of HB 1943 and solar and grid modernization. I have a total of 32 PV panels on my home and am grateful for the savings this affords me and my family and the ability to do my part in making the state of Hawaii a clean, sustainable energy state. If we are to reach the modest goal of 70% clean, sustainable energy by 2030, the state should compel HECO to set compliance dates for steps and stages to reach that goal, including smart metering and advanced metering infrastructure (AMI) by 2024.

All electric energy customers should have the right to install PV panels on their properties without delays due to either neglected modernization of the grid by HECO or claims by the utility that more solar installations threaten reliability of the grid. Smart metering and customer to utility arrangements could ensure power for times of day, weather variations, and emergency conditions.

HB 1943, should be strengthened so that HECO, which holds a monopoly on electrical power, meets deadlines set by the PUC and the state legislature. The legislation should not permit HECO to set its own time table delaying modernization of the grid and so slowing down solar installations by customers. If HECO's current business model is inadequate, then the utility needs to reorganize with a workable business model oriented to the short and long term future of power needs in the state.

Such a business plan would take into account that in 2012 28% of all construction –something both desired in terms of higher employment and consistent with long range clean energy goals.

Lastly, the cost of energy is skyrocketing across the state. The cost of living in Hawaii is difficult at best for most families. Solar guarantees that families who install it will have more money to spend on other necessities: food, housing, transportation, and education.

Thank you for your solicitation of testimony,
Daniel Benedict
67-207 A Kahaone Loop
Waiialua HI 96791

Email: stlukebysea@yahoo.com

LATE

From: mailinglist@capitol.hawaii.gov
 Sent: Thursday, February 20, 2014 9:18 AM
 To: FINTestimony
 Cc: wao-hsl@WeAreOne.cc
 Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	Individual	Support	No

Comments: I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. I support strengthening SB 2656 to give stronger policy direction to the PUC. There is no rational reason to pollute our own environment or destroy ecosystems. www.WeAreOne.cc

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: Carrie Rautmann <csounding@gmail.com>
Sent: Wednesday, February 19, 2014 6:09 PM
To: FINTestimony; WAM Testimony
Subject: re: SB 2656 and HB 1943 final testimony



- I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable.
- Since 2009, the [average residential electricity rates have gone up by more than 50%](#) ! People should have the ability to pursue cleaner and cheaper options.
- Solar has been a major, sustainable economic engine for Hawaii. [As of 2012, it accounted for 28% of all construction expenditures in the state.](#)
- HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone.
- I am raising a family, and recognize the electric costs in my life time are soaring, what is this next generation going to be faced with, if they are limited to using the grid, and not having the potential to use solar energy. Solar energy represents a more renewable resource, and particularly because we live on Kauai, we have access to the sun. Please listen.

Thank you for considering these!

Carrie Rautmann

LATE

In support of HB 1943

Written Testimony by Mari Ono, Individual

- Hawaii's citizens deserve the right to install solar panels on home rooftops without interference from the utilities company. The delays and possible added expenses resulting from HECO's neglect are unacceptable and unjust.
- Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and more affordable options.
- Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state.
- HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone.
- Creating barriers to developing affordable and environmentally sound solutions to our energy problems is unethical and small thinking. Citizens are well aware of who actually benefits from these stalling tactics...and it ain't the communities or the environment of Hawaii!

Mahalo!

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:58 PM
To: FINTestimony
Cc: jgelert@yahoo.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
John Gelert	Individual	Support	No

Comments: I support the right for more people to use solar panels on their homes.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:51 PM
To: FINTestimony
Cc: mkelley323@gmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mary Lu Kelley	Individual	Comments Only	No

Comments: I support HB1943 to give stronger policy direction to the PUC. •I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. •Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. •Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. •HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. •Provide your own perspective: why is installing solar important to you?

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:45 PM
To: FINTestimony
Cc: mark@marksheehan.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Sheehan	Haiku Aina Permaculture Initiative	Comments Only	No

Comments: We need to modernize the grid. HECO and MECO have made it very hard to install solar and forced us to deal with rising utility costs--up 50% in the past 4 years. Please pass this bill.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:45 PM
To: FINTestimony
Cc: mark@marksheehan.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Sheehan	Haiku Aina Permaculture Initiative	Comments Only	No

Comments: We need to modernize the grid. HECO and MECO have made it very hard to install solar and forced us to deal with rising utility costs--up 50% in the past 4 years. Please pass this bill.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



TESTIMONY SUPPORTING HB 1943, HD2

To: Honorable Sylvia Luke, Chair, House Committee on Finance

From: SolarCity

Hearing on Feb. 20, 2014, at 1:30 p.m., Room 308

Aloha Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee:

Thank you for the opportunity to provide testimony supporting HB 1943, HD2, which initiates a process to modernize our electrical grid.

SolarCity serves homeowners, businesses, not-for-profit organizations, and government entities who want clean energy at a predictable cost. Our operations center in Mililani employs 100 local residents, and our customers and partners in Hawai'i include hundreds of local homeowners, the Hawai'i Department of Transportation, the Maui Arts & Cultural Center, KIUC, HECO, the Ulupono Initiative, the University of Hawai'i, and the U.S. Military.

In the last few years, thousands of Hawaii citizens have "gone solar," securing stable and predictable electricity costs. Yet, only one out of ten households have rooftop solar PV. Today, if you want to join your neighbors who have contributed to our state's effort to reduce consumption of foreign oil, you are in a race against others who want solar or maybe prevented from going solar altogether. Why? Because our investor owned utilities say the grid cannot safely accommodate more distributed generation.

Nine out of ten may be denied the opportunity to get rooftop solar because our 20th century grid has failed to keep up with 21st century innovation.

Without placing blame or speculating on the reason for this lack of foresight, it is clear that we need the support of our lawmakers to ensure that the issues regarding grid stability and distributed generation are considered through an objective process and decided on facts rather than fears and presumptions.

HB 1943, HD2 calls for the Public Utilities Commission to develop a grid modernization plan that will serve the public interest. Significantly, the bill does not predetermine a particular outcome.

Thank you for the opportunity to testify in support of HB 1943, HD2.

Mahalo,

Jon Yoshimura, Director of Policy & Electricity Markets, SolarCity Hawaii

From: Gloria Adams <gloriaadams4@gmail.com>
Sent: Wednesday, February 19, 2014 7:41 PM
To: FINTestimony
Subject: HB 1943

I support HB 1943 because it is taking steps toward Hawaii becoming more energy independent. I hope our legislators take some concrete, timely action with regard to the HECO fiasco relating to rooftop PV installations for utility customers. It is also imperative that our legislators take immediate action to ensure that Hawaii has a "smart grid" in the very near future. It is time for the PUC to have more authority, financial support and specific plans to remedy this long standing problem and ensure that HECO takes responsibility for modernizing the grid.

I, like many others, have been adversely affected by HECO's arbitrary decision to change their interconnection procedures suddenly, without warning, on 9/6/13. I invested many months researching rooftop PV systems, contractors, and suitable finance options in hopes of making the right decision for myself and family. In August I signed a contract with a reputable solar company, made a \$8000.00 deposit, took out a loan for the balance of the cost and anticipated the installation of our system to be completed by late September. Low and behold HECO had other plans for us and many others. After making the financial investment in August I learned of HECO's new requirements for interconnection procedures and found out that HECO would not be approving our NEM application anytime soon because we live in an area with a highly saturated circuit. HECO could not give me any definitive answers as to the timeliness of the required studies or upgrades in order to approve my NEM application. I am now out my deposit, have a monthly loan payment, and still have to pay an exorbitant electric bill.

In November it appeared that there may be light at the end of the tunnel for those of us that could prove that we made a financial commitment with a solar company and/or lending institution prior to 9/6/13. I complied with all the requirements outlined by HECO and learned that my NEM application was eligible for review under the Interconnection Transition Plan. That was more than two months ago, still no approval because the infamous studies and upgrades have not been completed or determined.

Since September HECO has been saying they need to conduct numerous studies, test new technologies to make the grid able to respond more nimbly to changing demands and to store excess green energy, and take other mitigating steps to insure safety and reliability for all. The inter-connection studies should have been done by HECO as part of their routine distribution planning studies. Why has it taken so many months to conduct studies that should have already been done? What has HECO learned from these studies? Why was HECO not prepared for the increased level of PV installation when Hawaii's Clean Energy Initiative was launched back 2008, 5 years ago. Why is it that HECO does not have to comply with any reasonable deadlines to complete their numerous studies and come up with upgrades to their system? In other words, what has HECO accomplished since September other than putting a halt to PV installations across Oahu.

It is in the public's interest that you legislators ask these tough questions and require that HECO take corrective action in an expeditious manner. All residents of Hawaii should have the right to install and the ability to interconnect to the grid regardless of location of their residence. It should not be allowed for just those who had the resources to make the investment prior to 9/6/13.

Hawaii's energy cost have increased nearly 50% in the past 5 years. Solar PV is a way residents can reduce the financial burden of their escalating HECO bills and take care of our environment. Clean energy is important for all generations, however it is particularly important for our aging population who are faced with fixed incomes. It is everyone's kuliana to take all reasonable measures available to move Hawaii toward sustainable clean energy independence. As legislators you have the ability to enact laws to ensure that we meet our clean energy goals. You have the ability to hold HECO responsible for their inactions that have severely impacted many residents.

Please support HB 1943.

I am an individual HECO customer that feels we have been overlooked in this whole process. I will not be able to testify at the hearing, but want my written testimony to be considered.

Thank you,
Gloria Adams



I support HB1943 because I agree with the right of individuals to connect their PV units to the grid. I am a renter and therefore cannot take advantage of the savings that accompany PV units, but I support the rights of those who can, if it means that the solar industry will continue to grow and replace fossil fuels. Hawai'i is in a position to lead the country into the future, and our switch to renewable energy must continue if we are to do so.

I understand that HECO is facing real problems, but the discussion must continue with real deadlines and expectations being met by HECO. HECO must show their customers they are working out the problems, not just talking about them, and they will only do this with real pressure. HECO cannot be left to work the problems out by themselves because their action/inaction is affecting too many people.

TESTIMONY OF HERMINA MORITA
CHAIR, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
HOUSE COMMITTEE ON FINANCE



FEBRUARY 20, 2014
1:30 p.m.

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

TITLE: Relating to the Modernization of the Hawaii Electric System

Chair Luke 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 “address technical, policy, and economic issues associated with modernization of the electric grid” based on principles that touch on the diversification of renewable energy resources, but with an emphasis on maximizing distributed generation interconnections, and that have a focus on customer preferences which are to be incorporated into utility distribution system and integrated resource planning. The Commission is also required to commence a regulatory proceeding to “address the technical, policy, and economic issues associated with the modernization of the electric grid in the State, based on the principles in [HRS] section 145.5(b)...” (“Proceeding”). The Proceeding’s scope is defined and multiple procedural timelines for the Proceeding are allowed.

Public utilities are required to file detailed reports with the Commission during the course of the Proceeding on “each customer request to interconnect distributed generation that the utility has denied or has delayed for at least thirty days beyond any applicable deadline in the utility’s interconnection procedures,” with the provision of specific customer and technical information being mandated and made open to the public. Further, the Commission must report its findings and recommendations from the Proceeding prior to the 2016 legislative session, in addition to quarterly interim progress reports to the Legislature being required on the implementation of short-term solutions.

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 the Proceeding. General fund appropriations of unspecified amounts for fiscal year 2014-2015 for the Commission and the Consumer Advocate to carry out and participate in the Proceeding are made. Finally, this measure has an effective date of July 1, 2050.

POSITION:

The Commission opposes this measure and prefers the language offered in the Senate companion, S.B. No. 2656, S.D. 1. A proposed House Draft 3 is attached for the Committee’s consideration. The Commission would also like to offer the following comments.

COMMENTS:

The Commission is concerned that H.B. No. 1943, H.D. 2 does not adequately acknowledge many of the underlying technical, economic, and policy concerns associated with grid modernization. This is particularly true if the scope and issues of the Proceeding solely promote distributed generation at the expense of a diverse resource and technology portfolio and other energy options that may potentially provide greater benefits to both the system and to ratepayers that do not have access to alternative energy resources, but who must continue to rely on the electric utility to provide all or a majority of their electricity requirements.

The Commission recognizes the frustration that has been caused by the Hawaiian Electric Companies’¹ inability to review and accommodate net energy metering (“NEM”) applications in a timely way due to the exponential growth of customer-sited photovoltaic installations. However, the various technical, economic, fairness, and equity issues cannot be overlooked. Therefore, rather than focus on interconnection and customer generation rights, a Proceeding’s key objectives must include the review of an updated regulatory compact that acknowledges customers’ growing energy options, articulating the obligations and responsibilities of an electric utility, as well as the obligations and responsibilities of the customer/generator. Properly designed rate

¹The Hawaiian Electric Companies include Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., and Hawaii Electric Light Company, Inc.

structures to send correct pricing signals that would result in a more competitive market for renewable energy generation and ancillary services for grid support should also be a desired outcome of such a Proceeding.

The Commission believes that the language offered in the attached proposed House Draft 3 is sufficient to give legislative guidance and direction for a Proceeding before the Commission to consider the critical issues concerning modernization of Hawaii's electric grids. Also described below are the specific concerns that the Commission has regarding H.B. No. 1943, H.D. 2.

Specific Concerns

The Commission also points out that some requirements of this measure are unclear. While the Commission does believe that the interests of ratepayers is of paramount importance when discussing the modernization of Hawaii's grids, it is not clear what is meant by requiring that the Proceeding be used to "[i]ncorporate customers' current and forecasted preferences into the utility distribution system and integrated resource planning," as indicated on page 2, line 9 to line 11. The Commission asks: How are "customers' current and forecasted preferences" to be determined? Are these preferences different from those that the Consumer Advocate currently represents in the course of all Commission proceedings, including integrated resource planning? Are these preferences, once determined, to be given a higher priority over other critical concerns, including safety and system reliability concerns? And, perhaps most importantly, is it appropriate to design an electric grid that must serve the needs of all customers on the basis of preferences expressed by those that have a vested interest in those preferences?

Further, this measure would require numerous reports to be produced and filed by both utilities and the Commission, which would further distract the Commission from focusing on finding the regulatory solutions to Hawaii's grid modernization issues that this measure is intended to produce. The Commission would ask the Committee to consider whether this measure's reporting mandates are worth diverting the Commission's limited resources away from many other important energy-focused dockets and programs.² The Commission also notes that it recently issued its decision

²The Commission notes that, as of the date of this hearing, there are a number of bills before the Legislature that would each require added study and reporting by the

approving the Hawaiian Electric Companies' application to waive multiple renewable energy projects from the existing competitive bidding framework in an effort to help encourage more low-cost renewable energy that will broadly benefit ratepayers (Docket No. 2013-0156). Additionally, there are currently open regulatory proceedings and/or programs relating to a review of the Hawaiian Electric Companies' decoupling mechanism (Docket No. 2013-0141); the development of Hawaii's On-bill Financing Program and the implementation of the Green Energy Market Securitization Program created by Act 166, Session Laws of Hawaii 2013; as well as open proceedings regarding integrated resource planning for the Hawaiian Electric Companies (Docket No. 2012-0036) and electric system reliability issues (Docket No. 2011-0206) for which the Commission anticipates near-term determinations.

Thank you for the opportunity to testify on this measure.

Commission on a number of energy-focused issues. For example, these measures include, in addition to this bill, H.B. No. 1543, H.D. 1 (requiring the Commission to study existing NEM contracts with customer generators for the purpose of examining various NEM issues and to report to the Legislature prior to the 2015 legislative session), H.B. No. 1939, H.D. 1 (requiring the Commission to investigate and report prior to the 2015 legislative session on the feasibility of updating and extending the Hawaii Clean Energy Initiative program plans and Hawaii's Renewable Portfolio Standards to include benchmarks beyond 2030), and H.B. No. 2619, H.D. 1 (requiring the Commission to establish energy storage portfolio standards for Hawaii, and, in so doing, analyze currently available and commercially viable energy storage for the State as compared to other non-storage options).

H.B. NO. 1943, H.D.2
[Proposed H.D. 3]

A BILL FOR AN ACT

RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that a modern electrical
2 grid is essential to meeting Hawaii's clean energy goals. In
3 recent years, Hawaii's electric utilities have integrated
4 significant levels of new renewable energy projects on each
5 island grid, and distributed generation in the form of rooftop
6 photovoltaic systems has been the fastest growing share of new
7 renewable energy generation each year. To date, Hawaii's
8 electric utilities are on track to exceed the next renewable
9 portfolio standard goal in 2015. However, moving beyond the
10 current levels of renewable energy on each grid will likely
11 require further investment in advanced grid modernization
12 technology to meet the State's aggressive clean energy goals and
13 maintain a reliable electricity grid.

14 The legislature believes further investments in advanced
15 grid modernization technology may be needed because Hawaii's
16 island grids are reaching significant levels of variable
17 renewable energy that can affect the overall operation of the

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 grid at the system level and the provision of safe and reliable
2 service at the point of delivery to customers. Continued growth
3 in renewable energy, particularly distributed generation, will
4 require investment to modernize the grid to interconnect high
5 levels of distributed generation and support other new customer
6 energy options, such as electric vehicles and demand response
7 technologies.

8 The legislature also finds that the rapid growth of the
9 State's solar industry has reduced Hawaii's dependence on
10 imported oil, created thousands of jobs during a statewide
11 economic downturn, and provided thousands of households and
12 businesses new options to manage their energy bills. The
13 legislature believes a long-term, sustainable solar industry is
14 in the State's interest.

15 The legislature additionally finds that as distributed
16 generation plays an increasingly significant role in the State's
17 clean energy transition the utilities' processes for
18 interconnection and distribution system planning will need to
19 evolve to become more transparent and timely to allow
20 electricity customers to exercise their options to manage energy
21 use. In addition, new rules and tariffs are needed for
22 distributed generation. The current state policies, incentives,

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 rules and tariffs for distributed generation were developed to
2 support a nascent and emerging solar industry. Now that this
3 energy source and industry have achieved significant growth,
4 tariffs for distributed generation need to emerge where
5 customers pay for grid services provided to them and are
6 compensated for the valuable services provided to the grid by
7 distributed generation. These modified tariffs will also set
8 the stage for further technological innovation in this sector as
9 advanced information, PV inverters, and energy storage systems
10 will expand the nature of services offered by customer-sited
11 resources to the grid.

12 The legislature also finds that the resolution of the
13 matters noted in this measure require detailed discussion of
14 technical, policy, and economic issues associated with the
15 modernization of Hawaii's island grids that are best
16 accomplished in a regulatory proceeding by the public utilities
17 commission to ensure fairness, equity, and just and reasonable
18 rates.

19 To help accomplish this regulatory proceeding in a timely
20 manner, the legislature provides further policy guidance in
21 conjunction with section 269-145.5 concerning advanced grid
22 modernization technology.

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 Future investment and planning to modernize Hawaii's
2 electric grids cost-effectively should: (1) enable a diverse
3 portfolio of renewable energy resources; (2) expand options for
4 customers to manage their energy use; (3) allow distributed
5 generation fair and open access to interconnect to the grid at
6 non-discriminatory terms and just and reasonable rates, and the
7 commission should ensure such access and rates through
8 applicable rules, orders, and tariffs; and (4) provide fair
9 payment for grid services provided to customers and fairly
10 compensate customers for valuable services provided to the grid
11 by distributed generation.

12 It is the legislature's intent that the public utilities
13 commission open a proceeding by July 1, 2014 to address the
14 technical, policy, and economic issues associated with
15 modernization of Hawaii's electricity grids.

16 The legislature requests that the commission complete the
17 proceeding and submit a final report on the results of the
18 proceeding to the legislature no later than twenty days prior to
19 the convening of the regular session of 2016. The legislature
20 also requests that the public utilities commission identify and
21 establish an interim timeline for resolving short-term, high-
22 priority issues associated with grid modernization. For issues

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 that require further in-depth analysis and discussion by the
2 parties, the commission would establish a longer timeline for
3 resolution and reporting under this proceeding.

4 SECTION 2. (a) The public utilities commission shall
5 commence a proceeding by July 1, 2014, to address the technical,
6 policy, and economic issues associated with the modernization of
7 Hawaii's electricity grid and shall take into consideration the
8 following:

- 9 (1) Development of a diverse portfolio of renewable energy
10 resources;
- 11 (2) Expanded options for customers to manage their energy
12 use;
- 13 (3) The manner in which distributed generation shall be
14 allowed access to grid interconnection without
15 discriminatory terms, with fair and reasonable rates;
16 and
- 17 (4) Providing fair payment for grid services provided to
18 customers and fair compensation to customers for
19 services provided to the grid by distributed
20 generation.

21 The commission shall ensure such access and rates through
22 applicable rules, orders, and tariffs. The commission

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 proceeding required under this subsection may encompass one or
2 more procedural timelines, as determined necessary and
3 appropriate by the commission.

4 (b) The commission shall submit a report of its findings
5 and recommendations to the legislature no later than twenty days
6 prior to the convening of the regular session of 2016.

7 (c) The commission and the division of consumer advocacy
8 within the department of commerce and consumer affairs shall be
9 exempt from section 103D-304, Hawaii Revised Statutes, in its
10 procurement of any professional services needed to conduct the
11 proceeding.

12 SECTION 3. There is appropriated out of the general
13 revenues of the State of Hawaii the sum of \$750,000 or so much
14 thereof as may be necessary for fiscal year 2014-2015 for the
15 public utilities commission to conduct a proceeding pursuant to
16 section 2 of this Act.

17 The sum appropriated shall be expended by the public
18 utilities commission for the purposes of this Act.

19 SECTION 4. There is appropriated out of the general
20 revenues of the State of Hawaii the sum of \$750,000 or so much
21 thereof as may be necessary for fiscal year 2014-2015 for the
22 division of consumer advocacy within the department of commerce

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

1 and consumer affairs to represent the interests of all consumers
2 in accordance with section 269-51, Hawaii Revised Statutes, in
3 the course of the proceeding pursuant to section 2 of this Act.

4 The sum appropriated shall be expended by the division of
5 consumer advocacy within the department of commerce and consumer
6 affairs for the purposes of this Act.

7 SECTION 5. This Act shall take effect on July 1, 2014.

H.B. NO. 1943, H.D. 2

[Proposed H.D. 3]

Report Title:

Grid Modernization; Hawaii Electric System; Public Utilities Commission; Division of Consumer Advocacy; Appropriation

Description:

Requires the public utilities commission to initiate a proceeding no later than July 1, 2014, to address the technical, policy, and economic issues associated with the modernization of Hawaii's electricity grids. Requires the division of consumer advocacy to represent the interests of all consumers at the proceeding. Appropriates funds to the commission and division of consumer advocacy. Takes effect 7/1/2014.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 9:14 PM
To: FINTestimony
Cc: mpshaw10@gmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Shaw	Individual	Comments Only	No

Comments: I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. I have an existing 2kw solar voltaic system and wish to expand it with another 2kw, but I'm told my area cannot have any more new solar voltaics without a study that would cost more than the new system. This is crazy!

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



HOUSE COMMITTEE ON FINANCE

February 20, 2014, 1:30 P.M.
(*Testimony is 3 pages long*)

LATE

TESTIMONY IN SUPPORT OF HB 1943 HD2

Aloha Chair Luke and Members of the Committee:

The Sierra Club of Hawai'i, with over 12,000 dues paying members and supporters statewide, ***strongly supports*** HB 1943. This measure prioritizes the development of a grid modernization plan so that residents have the right to choose clean, renewable energy.

I. Addressing Customer Need

Melba Amaral, a Faith Action for Community Equity volunteer, recently wrote a story for the Sierra Club's Hawaii Solar Voice's website.¹ She runs a small day care facility for toddlers. She has an electric bill of about \$400 a month. She's fairly good at minimizing her electricity usage. She unplugs her cable box every night. She uses a clothesline.

Her only "luxury" is a single window air conditioner that she uses to make sure her Kalihi house doesn't become too hot for her toddlers. Ms. Amaral could benefit tremendously from rooftop solar. She's doing all of the right things to reduce her electric bill, but no other relief is in sight. And yet, under the current situation, she's denied the opportunity to generate her own electricity and help the state out with its clean energy goals.

This measure would help protect Ms. Amaral's right to choose rooftop solar. As you consider this measure, please consider Ms. Amaral's plight and thousands of other residents that are in a similar situation. Hawaii's electrical rates are currently 2 to 3 times the national average. Average electrical rates have increased by 50% since 2009. Our electrical distribution system should be designed to service all customers, even those that may choose to generate their own electricity, and in a manner that results in a net cost savings for all ratepayers.

¹ <http://www.hawaiisolarvoices.org/1/post/2013/11/i-need-solar-on-my-roof-and-heco-off-my-back.html>

II. *The Need to Integrate More Rooftop Solar*

Hawai'i continues to be one of the most fossil fuel dependent states in the nation. Every year, the state imports approximately 45 million barrels of oil. This dependence results in the outflow of the State's financial resources and creates a tenuous reliance on an unsustainable and unstable resource.

Distributed solar is a shining success story in Hawai'i's efforts to adopt clean energy. As reported by DBEDT, solar energy provided 15% of Hawai'i's renewable energy generation in 2012 and 26% of all construction expenditures.² That bears repeating. 26% of all construction expenditures or approximately a quarter of all construction jobs created in Hawaii came out of the solar industry. Failing to allow customers to choose rooftop solar puts this growth in serious jeopardy.

Even HECO acknowledges we need to achieve "uniform, timely, and unfettered access for all customers to interconnect on a given circuit."³

III. *Benefits of a Modern, Efficient Grid*

The benefits of transforming from a 19th century oil-based grid, to a modern, efficient grid are numerous. Consider:

- **Reliability and consistency.** Improved power quality resulting in economic and productivity gains.
- **Efficiency.** Effective asset utilization and resource management.
- **Flexibility.** Enables new load management, distributed generation, and demand-response options.
- **Environmentally friendly.** Directly increases the amount of renewable energy and energy efficiency options available, and allows a drastic reduction in fossil fuel consumption.

IV. *PUC Has Discretion to Address Broader Technical and Economic Issues*

Importantly, this measure does not pre-determine how solar can or should interconnect. It expressly ensures that the PUC has control over reliability and safety issues and allocates resources so that the PUC can develop a grid modernization plan that supports the public interest of allowing customers to interconnect rooftop solar in a timely and reasonable manner.

² http://energy.hawaii.gov/wp-content/uploads/2011/10/FF_June2013_R2.pdf

³ 2013 Integrated Resources Planning Report, June 28, 2013, page ES-6. Available online at: http://www.hawaiianelectric.com/vcmcontent/IntegratedResource/IRP/PDF/IRP_2013_Report-Executive-Summary-Transmittal-Letter.pdf

V. PROPOSED AMENDMENTS:

On page 2, lines 1-4, the PUC recommended different language. Specifically that distributed generation shall have “fair and open access,” to the grid. This term well-interpreted nationally and has context in the energy arena. We suspect this language will be easier to understand and apply, in comparison to what is currently in HD2.

Page 2, lines 1-4:

- (3) ~~Maximize distributed generation interconnections in non-discriminatory terms and at just and reasonable rates, while maintaining reliability of the grid, through applicable rules, orders, and tariffs;~~
Allow distributed generation fair and open access to interconnect to the grid at non-discriminatory terms and at just and reasonable rates, and the commission should ensure such access and rates through applicable rules, orders, and tariffs; and

Mahalo for the opportunity to testify.

finance8-Danyl

LATE

From: Robert Watkins <doc.watkins@me.com>
Sent: Wednesday, February 19, 2014 9:26 PM
To: FINTestimony
Subject: HB1943

It's so important for Hawaii residents to be able to net meter, to help the earth by burning less fossil fuels and to reduce our electric bills.

Sent from my iPad

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 9:37 PM
To: FINTestimony
Cc: bobwrigley@aol.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Wrigley	Individual	Comments Only	No

Comments: The people should be able to put renewable solar energy panels on their roof to lower the cost of their energy and not be refused by HECO. HECO should be an enabler and not an obstacle.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: Tlaloc Tokuda <tlalocct@hotmail.com>
Sent: Wednesday, February 19, 2014 10:54 PM
To: WAM Testimony; FINTestimony
Subject: FW: SB 2656 & HB 1943

LATE

From: tlalocct@hotmail.com
To: taksu2004@yahoo.com
Subject: SB 2656 & HB 1943
Date: Thu, 20 Feb 2014 08:21:18 +0000

Dear Senators and Reps,

I am passionate about solar/sustainable energy and have been a critic of HELCO since the 70's...I actually worked on the Hawaii Home Energy Book, which assisted homeowners in designing passive solar houses and later worked on materials (UH under Dr Jim Harpstrite) on renewable energy for high school students...I submit this as an individual and i am in support of SB 2656 & HB 1943. though SB 2656 was weakened when the Senate adopted language recommended by the PUC that would let them set the deadline for fixing the grid, instead of ensuring legislative oversight. The has shown us time and again that they are hopeless at setting or keeping deadlines, so both houses should pass SB 2656 & HB 1943 that strengthening and give stronger policy direction to the PUC. I will not attend the hearinig.

I should have the right to install PVs on my roof, my brother who lives in Kona tried to add 15 more PV panels to his roof but was denied due to HELCO rules and regs...i am appalled to learn that in the past 5 years average residential electricity rates have gone up more than 50%. Solar (mostly PVs but also thermal) has been a major sustainable economic engine for Hawaii; as of 2012 it accounted for 28% if all construction expediture in the state. But HELCO has repeatedly failed to demonstrate a plan to facilitate rooftop PVs. The PUC needs to concretely set an operational plan that allows for massive PV extension and expansion which is fair and efficient to everyone. So please Reps and Senators deliver SB 2656 & HB 1943 that will really assist the people of Hawaii instead of give HELCO cart blanche to screw over rate payers and make the PUC into a true PUC to serve the people of Hawaii.

Mahalo,
Tlaloc Tokuda
73-4599 Kukuki St
Kailua Kona , HI 96740

I would like a responds to those voting against either bill as to their reason and rationale.



From: Pete Wilson <perhansahi@gmail.com>
Sent: Wednesday, February 19, 2014 11:06 PM
To: FINTestimony
Subject: in support of HB 1943

I am an individual who lives in Leilani Estates, a development on the Big Island, I am building a home there upon which I want to place a photo voltaic system. I first learned how inept and antiquated HELCO is first hand when I got my temporary. I had to call my electrical contractor to light a fire under the management since they had lost my paperwork and my \$550 “contribution” (that’s what they called my fee to start my experience with HELCO) and were 3 weeks over the length of time that they said it would take to setup my temporary attachment to the Hawaiian grid. When I finally got my connection I was amazed to discover that the digital meter that was attached to the temporary doesn’t have wifi capability and can not communicate through the grid with the main. So HELCO doesn’t use wifi capable meters so they have to use more manpower to read the meters. That makes electricity cost more.

I live not 1 and a half miles from Puna Geothermal Venture and I am completely in favor of the expansion of geothermal energy on the Big Island and elsewhere in Hawaii. But the grid that comes out of PUNA is pathetic. HELCO seems to have a consistent policy to exist in a framework that is reminiscent of the zeitgeist of the 1950’s. We are in the 21st century with global climate change a proven theory and we should be taking proactive steps to make a difference.

HELCO as a public utility must respond to the needs of the government (i.e. the people) not the shareholders. I deserve the right to install solar panels on my roof without interference unless there are safety or reliability concerns from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50% according to PUBLIC UTILITIES COMMISSION STATE OF HAWAII ANNUAL REPORT (HAW. REV. STAT. § 269-5) FISCAL YEAR 2011-12. People should have the ability to pursue cleaner and cheaper options than the misguided management of HELCO can see. Since solar has been a major, sustainable economic engine for Hawaii, as of 2012, it accounted for 28% of all construction expenditures in the state according to the State of Hawaii Energy Resources Coordinator’s Annual Report for 2013. It seems that this would be a win win for the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. I will not be testifying in person at the hearing. But I want to emphasize my support of HB 1943

Sincerely,

Pete Wilson

13-927 Kahukai Street

Pahoa, HI 96778

LATE

From: Harvey Arkin <alohaxtc@hawaii.rr.com>
Sent: Wednesday, February 19, 2014 11:39 PM
To: FINTestimony
Subject: HB 1943

HB 1943

- I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable.
- Since 2009, the [average residential electricity rates have gone up by more than 50%](#)! People should have the ability to pursue cleaner and cheaper options.
- Solar has been a major, sustainable economic engine for Hawaii. [As of 2012, it accounted for 28% of all construction expenditures in the state.](#)
- HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone.

Harvey Arkin
3349 Anoa'i Pl
Honolulu, HI 96822
alohaxtc@hawaii.rr.com

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, February 20, 2014 9:18 AM
To: FINTestimony
Cc: wao-hsl@WeAreOne.cc
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	Individual	Support	No

Comments: I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. I support strengthening SB 2656 to give stronger policy direction to the PUC. There is no rational reason to pollute our own environment or destroy ecosystems. www.WeAreOne.cc

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



From: mailinglist@capitol.hawaii.gov
 Sent: Thursday, February 20, 2014 9:33 AM
 To: FINTestimony
 Cc: alan.lennard.808@gmail.com
 Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Alan Lennard	Individual	Support	No

Comments: I am in Support of bill HB 1943. I am testifying on behalf of myself . I believe that all solar customers deserve the right to install solar panels on their home roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. All of the people I know who are currently seeking to install pv on their homes are feeling significant anxiety due to the HECO LVM process. The process was initiated arbitrarily without adequate warning to potential customers and installers and then baby-step solutions were instituted which only performed band-aid remedies. The Hawai'i solar customers deserve much more recognition and HECO has plenty of evidence to support the fact that grid instability will not occur at the current levels. Thank you Alan Lennard

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 6:28 PM
To: FINTestimony
Cc: shannonkona@gmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Rudolph	Individual	Support	No

Comments: Support.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



LATE

TESTIMONY SUPPORTING HB 1943, HD2

To: Honorable Sylvia Luke, Chair, House Committee on Finance

From: SolarCity

Hearing on Feb. 20, 2014, at 1:30 p.m., Room 308

Aloha Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee:

Thank you for the opportunity to provide testimony supporting HB 1943, HD2, which initiates a process to modernize our electrical grid.

SolarCity serves homeowners, businesses, not-for-profit organizations, and government entities who want clean energy at a predictable cost. Our operations center in Mililani employs 100 local residents, and our customers and partners in Hawai'i include hundreds of local homeowners, the Hawai'i Department of Transportation, the Maui Arts & Cultural Center, KIUC, HECO, the Ulupono Initiative, the University of Hawai'i, and the U.S. Military.

In the last few years, thousands of Hawaii citizens have "gone solar," securing stable and predictable electricity costs. Yet, only one out of ten households have rooftop solar PV. Today, if you want to join your neighbors who have contributed to our state's effort to reduce consumption of foreign oil, you are in a race against others who want solar or maybe prevented from going solar altogether. Why? Because our investor owned utilities say the grid cannot safely accommodate more distributed generation.

Nine out of ten may be denied the opportunity to get rooftop solar because our 20th century grid has failed to keep up with 21st century innovation.

Without placing blame or speculating on the reason for this lack of foresight, it is clear that we need the support of our lawmakers to ensure that the issues regarding grid stability and distributed generation are considered through an objective process and decided on facts rather than fears and presumptions.

HB 1943, HD2 calls for the Public Utilities Commission to develop a grid modernization plan that will serve the public interest. Significantly, the bill does not predetermine a particular outcome.

Thank you for the opportunity to testify in support of HB 1943, HD2.

Mahalo,

Jon Yoshimura, Director of Policy & Electricity Markets, SolarCity Hawaii

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:43 PM
To: FINTestimony
Cc: mendezj@hawaii.edu
Subject: *Submitted testimony for HB1943 on Feb 20, 2014 13:30PM*

LATE

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 5:12 PM
To: FINTestimony
Cc: kpterra@gmail.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Kelly Pomeroy	Individual	Support	No

Comments: It would be unconscionable for Hawaii not to maximize its use of solar energy...especially since we have so much of it, and we will be so strongly impacted by sea level rise and ocean acidification.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 4:45 PM
To: FINTestimony
Cc: mark@marksheehan.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM



HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Sheehan	Haiku Aina Permaculture Initiative	Comments Only	No

Comments: We need to modernize the grid. HECO and MECO have made it very hard to install solar and forced us to deal with rising utility costs--up 50% in the past 4 years. Please pass this bill.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



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
HOUSE COMMITTEE ON FINANCE

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

February 20, 2014

Chair Luke, Vice-Chairs Nishimoto and Johanson 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 are to: (i) amend the public utilities commission principles regarding the modernization of the electric grid; (ii) require the commission to initiate a proceeding no later than July 1, 2014, to discuss upgrades to the Hawaii electric system for anticipated growth of customer generation; and (iii) appropriate funds to cover costs of the proceeding.

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

- 1) Comments. Clearly, this measure supports our clean energy goals. Its intent is also clear regarding modernization of our electric grids (lines 4 to 10, p.1), without which, in our opinion, it will be difficult to integrate the level of renewables needed to meet our clean energy goals:
 - a) However, we do not see how the intent can be accomplished if the focus of this measure is, as is currently drafted, on distributed generation.
 - b) Thus, we 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 with an amendment to broaden its scope to include all renewable generation.

Mahalo for this opportunity to testify.

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 7:25 PM
To: FINTestimony
Cc: kaloli.pt@gmail.com
Subject: *Submitted testimony for HB1943 on Feb 20, 2014 13:30PM*



HB1943

Submitted on: 2/19/2014

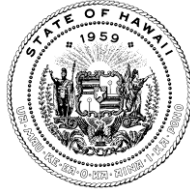
Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Ann Strong	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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



NEIL ABERCROMBIE
GOVERNOR

SHAN S. TSUTSUI
LT. GOVERNOR

STATE OF HAWAII
OFFICE OF THE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

335 MERCHANT STREET, ROOM 310
P.O. Box 541
HONOLULU, HAWAII 96809
Phone Number: 586-2850
Fax Number: 586-2856
www.hawaii.gov/dcca

KEALI'I S. LOPEZ
DIRECTOR

JO ANN M. UCHIDA TAKEUCHI
DEPUTY DIRECTOR

TO THE HOUSE COMMITTEE ON
FINANCE

THE TWENTY-SEVENTH LEGISLATURE
REGULAR SESSION OF 2014

THURSDAY, FEBRUARY 20, 2014
1:30 P.M.

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

HOUSE BILL NO. 1943 H.D.2 - RELATING TO THE MODERNIZATION
OF THE HAWAII ELECTRIC SYSTEM

DESCRIPTION:

This measure proposes to require the Public Utilities Commission to amend its principles regarding modernization of the electric grid. It also requires the Commission to initiate a proceeding no later than July 1, 2014, to discuss upgrades to the Hawaii electric system for anticipated growth of customer generation.

POSITION:

The Division of Consumer Advocacy supports the intent of this measure with comments.

COMMENTS:

The Consumer Advocate is aware of the number of technical issues that are arising due to the current state of the electric grids in the Hawaiian Islands. The current electric grids are unable to accommodate all of the individuals and businesses that are interested in interconnecting distributed generation systems, more commonly known as photovoltaic systems or PV systems, without some delay, additional studies, and/or costs. The current electric grids also constrain the ability to add larger renewable energy projects as well.

The Consumer Advocate has concerns; however, with some of the proposed provisions in H.D. 2. In proposed Hawaii Revised Statutes Section 269-145.5, H.D. 2 provides that, "The commission shall address technical, policy, and economic issues associated with modernization of the electric grid, based on the following principles:"

(5) Incorporate customers' current and forecasted preferences into the utility distribution system and integrated resource planning.

This provision is vague and ambiguous as to what is meant by "customer preferences" and how these preferences are to be measured and determined. If this is meant to be a reference to distributed generation, then the previous paragraphs adequately address distributed generation as a principle to be studied as part of modernizing the electric grid.

The issue of how the grid should be upgraded and the evaluation of the costs associated with such upgrades are expected to be analyzed in the recommended actions identified by the final report filed by the independent facilitator in Docket No. 2011-0206, which was the Commission's Reliability Standards Working Group proceeding. Until those actions have been completed, the proposed measure may be premature.

The Consumer Advocate and the Public Utilities Commission are currently working with a number of stakeholders on revising the parallel Senate version of this bill, S.B. No. 2656. The Consumer Advocate recommends deferral of this bill to allow the parties time to come to a mutually agreed upon draft that can be presented to both the House and the Senate.

Thank you for this opportunity to testify.

LATE

My name is William Walker and I am a resident of Ewa Beach that installed a \$35,000.00 PV system at my residence in October 2013. Shortly after the installation of my system I became aware of HECO's new NEM / grid interconnectivity policy. HECO now requires that a NEM agreement be submitted and approved prior to the installation of the system which is exactly the opposite of the former process where the NEM agreement was the final step. HECO has determined the circuit in my neighborhood is above maximum saturation, which may require further studies and improvement before I can connect.

In late November 2013, I received a letter from HECO stating that my system met their new guidelines which they had established for those of us who were "in limbo" and we would be "grandfathered" into the system without any additional costs for studies or grid upgrade fees. In mid January 2014 I received another letter from HECO, which stated that despite the promise to be grandfathered into the system HECO could not approve me because of the saturation of level of my circuit.

HECO and HECO alone has created this "problem" and every time they propose a short term solution, they eventually go back on their word citing safety and reliability concerns. My PV system has been up for four months and HECO has not given me a timeline for when their "studies" or "upgrades" are going to be started, conducted, completed, etc.

I've had many sleepless nights and experienced a great amount of unnecessary stress due to HECO's actions.

I do not trust HECO and have no faith in their ability to make improvements to the grid on their own, which is why I support HB 1943.



From: mailinglist@capitol.hawaii.gov
 Sent: Thursday, February 20, 2014 7:10 AM
 To: FINTestimony
 Cc: cdbevis@yahoo.com
 Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Carol Bevis	Individual	Support	No

Comments: Please help the islands become SUSTAINABLE once again. Please support alternative energy research and implementation. AND: * I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. * Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. * Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. * HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. KIUC also needs to work with alternative sources and get rid of "smart meters". My 20 yr. old nephew has cancer. How many have to suffer and die before we realize we are contaminating our OWN HABITAT? Aloha!

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

Anthony Aalto
3946 Lurline Drive • Honolulu, Hawai'i 96816
808.234.9779

Committee on Finance
February 20, 2014 1:30pm

Testimony in support of HB 1943

RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM

Aloha Chair Luke and Members of the Committee,

Thank you for this opportunity to testify. I do so as a frustrated HECO customer who would like to install a PV system on my roof, but have been denied the opportunity because I live in a so-called saturated zone.

From my research I believe that HECO is overstating the safety issue. There has been no case anywhere in Hawaii of "overload backflow", indeed I note that representatives of the manufacturers of the panels and inverters have testified that their equipment can detect such a problem and mitigate it. The lack of a true technical standard is why HECO keeps moving the goalposts and raising the amount of rooftop solar power it is prepared to accept. This makes clear that the issue is being used as a smokescreen.

I believe HECO is playing for time – delaying individual rooftop solar while trying to modernize its own generating capacity in the hope of holding on to its customers by regulatory fiat.

It is for this reason that I urge you to replace this paragraph:

Maximize distributed generation interconnections in non-discriminatory terms and at just and reasonable rates, while maintaining reliability of the grid, through applicable rules, orders, and tariffs;

With the PUC's original language of:

Allowing distributed generation fair and open access to interconnect to the grid at non-discriminatory terms and at just and reasonable rates, and the commission should ensure such access and rates through applicable rules, orders, and tariffs;

We taxpayers are your constituents and we need your help to ensure that HECO does not treat us as hostages who can be bullied into buying the monopoly utility's power when we want to generate our own.

I wish to testify concerning House Bill 1943. I support HB1943, and I will not be coming to the hearing in person.

It is clear to me that home-based solar electricity is the best way to provide energy for our personal lives. As technology improves, we will reach an ideal condition where every home is self-sufficient. Businesses will have their own solar power systems. There will be no need for a power grid. As we transition into that state, the existing power grid is a backup system that is available at night, while solar power is available during the day.

There is no good reason to burn fossil fuels for electrical power. This is an obsolete technology that is contributing to global warming, which could make life on our islands almost unbearable. We can understand HECO's interest in self-preservation, but it is not in our interest. We need to transition to solar electricity with all possible haste, not only in Hawaii but worldwide. Locally, this means that we can allow no more foot-dragging by HECO and the PUC.

If HECO will not cooperate with the transition, homeowners will go to battery backup systems, which will make HECO irrelevant that much faster. It is past time to update the power grid to make the transition to solar power smoothly.

LATE

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 10:06 PM
To: FINTestimony
Cc: arbeit@hawaiiantel.net
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Wendy Arbeit	Individual	Support	No

Comments: HECO doesn't care about energy conservation, only profits. It should not be allowed to continue to infringe on the people's right and ability to install solar... and in a timely manner.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

finance1

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, February 19, 2014 9:45 PM
To: FINTestimony
Cc: davidsher@juno.com
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

LATE

HB1943

Submitted on: 2/19/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Support	No

Comments: Aloha I strongly urge you to support this bill. People deserve the right to install solar panels without interference from the utilities. HECO has repeatedly failed to demonstrate a plan for growth of innovative technologies. The PUC needs to chart a way forward on grid modernization that is fair and efficient for everyone.

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

LATE

From: Daniel Benedict <stlukebysea@yahoo.com>
Sent: Thursday, February 20, 2014 7:02 AM
To: FINTestimony
Subject: Testimony in support and strengthening HB 1943

Testimony in support of HB 1943

My name is Daniel Benedict and I submit testimony in support of HB 1943 and solar and grid modernization. I have a total of 32 PV panels on my home and am grateful for the savings this affords me and my family and the ability to do my part in making the state of Hawaii a clean, sustainable energy state. If we are to reach the modest goal of 70% clean, sustainable energy by 2030, the state should compel HECO to set compliance dates for steps and stages to reach that goal, including smart metering and advanced metering infrastructure (AMI) by 2024.

All electric energy customers should have the right to install PV panels on their properties without delays due to either neglected modernization of the grid by HECO or claims by the utility that more solar installations threaten reliability of the grid. Smart metering and customer to utility arrangements could ensure power for times of day, weather variations, and emergency conditions.

HB 1943, should be strengthened so that HECO, which holds a monopoly on electrical power, meets deadlines set by the PUC and the state legislature. The legislation should not permit HECO to set its own time table delaying modernization of the grid and so slowing down solar installations by customers. If HECO's current business model is inadequate, then the utility needs to reorganize with a workable business model oriented to the short and long term future of power needs in the state.

Such a business plan would take into account that in 2012 28% of all construction –something both desired in terms of higher employment and consistent with long range clean energy goals.

Lastly, the cost of energy is skyrocketing across the state. The cost of living in Hawaii is difficult at best for most families. Solar guarantees that families who install it will have more money to spend on other necessities: food, housing, transportation, and education.

Thank you for your solicitation of testimony,
Daniel Benedict
67-207 A Kahaone Loop
Waiialua HI 96791

Email: stlukebysea@yahoo.com

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, February 20, 2014 9:18 AM
To: FINTestimony
Cc: wao-hsl@WeAreOne.cc
Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	Individual	Support	No

Comments: I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. I support strengthening SB 2656 to give stronger policy direction to the PUC. There is no rational reason to pollute our own environment or destroy ecosystems. www.WeAreOne.cc

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



From: mailinglist@capitol.hawaii.gov
 Sent: Thursday, February 20, 2014 12:42 PM
 To: FINTestimony
 Cc: scoleman@surfrider.org
 Subject: Submitted testimony for HB1943 on Feb 20, 2014 13:30PM

HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Stuart Coleman	Individual	Comments Only	No

Comments: My name is Stuart Coleman, and I live in the McCully area and I support this bill. I deserve the right to install solar panels on my roof without interference from the utilities. The delays and possible added expense resulting from HECO's neglect are unacceptable. Since 2009, the average residential electricity rates have gone up by more than 50%! People should have the ability to pursue cleaner and cheaper options. Solar has been a major, sustainable economic engine for Hawaii. As of 2012, it accounted for 28% of all construction expenditures in the state. HECO has repeatedly failed to demonstrate a plan to facilitate rooftop solar. The Public Utilities Commission needs to oversee a plan that is fair and efficient for everyone. Aloha, Stuart

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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov

LATE

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, February 20, 2014 11:15 AM
To: FINTestimony
Cc: barbarageorge40@yahoo.com
Subject: *Submitted testimony for HB1943 on Feb 20, 2014 13:30PM*

HB1943

Submitted on: 2/20/2014

Testimony for FIN on Feb 20, 2014 13:30PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Barbara L. George	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.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



LATE

February 20, 2014

To Hawaii Legislators:

Vivint Solar is proud to be Hawaii's largest residential solar provider. We currently employ more than 100 local employees and provide solar power to more than 3,500 of your constituents in the islands. We are writing to support both grid modernization bills: SB 2656 and HB 1943. Vivint Solar encourages the respective committees to approve and pass the bills.

SB 2656 is necessary and we recommend stronger policy direction from this committee to ensure the technical issues limiting the installation of distributed solar are addressed and resolved on an expedited basis. For far too long we have heard rhetoric and seen obstructionist tactics from the local utilities in the state. While we are a strong proponent of cooperation with the utilities and finding ways to ensure grid reliability, Hawaii residents should not be denied the ability to install solar on their homes.

We also support HB 1943 that requires the commission to initiate a proceeding no later than July 1, 2014 to discuss upgrades to the Hawaii electric system for anticipated growth of customer generation.

Further, we recommend that this paragraph below be changed back to the PUC's language:

Maximize distributed generation interconnections in non-discriminatory terms and at just and reasonable rates, while maintaining reliability of the grid, through applicable rules, orders, and tariffs;

PUC's language:

Allowing distributed generation fair and open access to interconnect to the grid at non-discriminatory terms and at just and reasonable rates, and the commission should ensure such access and rates through applicable rules, orders, and tariffs;

The PUC's language is easier to apply because "fair and open access" has a legal definition and fits within national recommended standards for interconnection. In addition, it indirectly addresses a time component, which is necessary to ensure customers can be serviced in a timely manner.

We look forward to the outcome of these bills that will improve the technical, policy,

and economic issues associated with the modernization of the electric grid in Hawaii. We're proud to serve the residents of Hawaii.

Sincerely,

Greg Butterfield
Chief Executive Officer
Vivint Solar