

To: WAM Testimony

Cc: <u>alan.lennard.808@gmail.com</u>

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Thursday, February 20, 2014 9:31:53 AM

#### SB2656

Submitted on: 2/20/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

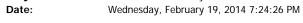
Submitted By	Organization	Testifier Position	Present at Hearing
Alan Lennard	Individual	Support	No

Comments: I am in Support of bill SB 2656.. 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 py 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 <u>less than 24 hours prior to the hearing</u>, 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.

To: WAM Testimony
Cc: kaloli.pt@gmail.com

**Subject:** \*Submitted testimony for SB2656 on Feb 20, 2014 09:05AM\*



# **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Ann Strong	Individual	Support	No

## Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.





#### LETTER OF SUPPORT FOR SB 2656 SD1

Measure Title: RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM.

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

Title: Advocacy; Appropriation (\$)

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 Description: 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

7/1/2050. (SD1)

DATE: Thursday, February 20, 2014

TIME: 9:05 a.m.

Conference Room 211

PLACE: State Capitol

415 South Beretania Street

# February 19, 2014

To Senator Ige and Senator Kidani

I write in support of the above bill. Grid modernization is one of the highest priorities and solutions to allow greater integration of renewable energy for Hawaii. We will continue to depend on oil and ride the price roller coaster unless we can tap the natural resources available to us.

During my two years as Director of the Maui Electric Vehicle Alliance, a project funded by the Department of Energy from October 1, 2011 to January 31, 2014, I discussed with project participants on the relevance and role of plug-in electric vehicles. One of the foremost reasons for the introduction of EVs is to charge overnight, on the otherwise curtailed wind energy. Another is to charge on solar during the day. Both wind and solar sources of energy are in abundance but its integration into the grid and distribution circuits is the issue here. This bill to modernize the grid will help all residents and businesses in Hawaii.

I earned my Ph.D. in Decision Science from London Business School (London University) in 1995 for my dissertation "Modeling Uncertainty in Electricity Capacity Planning," and subsequently worked in the energy sector in Houston and London. I also hold a Bachelor of Science in Engineering (B.S.E.) in Electrical Engineering, with a double major in Mathematics, from Duke University.

Yours Sincerely,

Anne Ku, PhD http://www.anneku.com



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

Committee on Ways and Means February 20, 2014 9:05pm

Testimony in support of SB 2656

RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM

Aloha Chair Ige 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 I 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.

It is for this reason that, although this bill is headed in the right direction, I believe the Legislature needs to be resolute and give the PUC much firmer guidance and make clear that the commission must move as fast as possible to resolve the technical issues holding up installations like mine. There is much HECO could do fairly rapidly to make it possible for thousands more customers like me to install rooftop panels. Creating a smart grid is a big project, but progress could start immediately if only HECO were not more concerned with preserving its business model and its profits.

We taxpayers are your constituents and we need you to help us overcome the obstacles.



Bill or Bobbie Best To: Subject: Date: WAM Testimony we support SB2656

Wednesday, February 19, 2014 1:21:51 PM

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

- $\bullet~$  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  $\underline{accounted} \ for \ 28\% \ of \ all \ construction \ expenditures \ in \ the \ state.$
- $\bullet~$  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

Mahalo for considering.

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



 From:
 Brian Emmons

 To:
 WAM Testimony

Subject: SB2656

Date: Wednesday, February 19, 2014 2:43:04 PM

Honorable Senators-

Please support SB2656, but please strengthen the bill 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.

Aloha, Brian Emmons





To: WAM Testimony
Cc: blockard@iname.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 3:48:14 PM

#### SB2656

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Brodie Lockard	Individual	Comments Only	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. Please amend SB2656 accordingly. 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 <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony
Cc: cdbevis@yahoo.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Thursday, February 20, 2014 7:04:35 AM

#### **SB2656**

Submitted on: 2/20/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Carol Bevis	Individual	Comments Only	No

Comments: Please strengthen SB 2656 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. I live on Kauai and am unhappy with how KIUC is handling our energy needs. Please insist on SUSTAINABILITY and ALTERNATIVES like wind, solar, etc. Aloha!

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony
Cc: clk5356@gmail.com

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Wednesday, February 19, 2014 12:49:37 PM

## **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Carolyn L Knoll	Individual	Oppose	No

Comments: I would support this bill if there were stronger policy direction given to the PUC.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



From: <u>Carrie Rautmann</u>

To: FINTestimony; WAM Testimony
Subject: re: SB 2656 and HB 1943 final testimony
Date: Wednesday, February 19, 2014 6:09:47 PM

 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 <u>average residential electricity rates have gone up by more than 50%!</u> 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

 From:
 Connie Rebert

 To:
 WAM Testimony

Subject: SB2656

Date: Wednesday, February 19, 2014 4:24:07 PM



Supporting SB2656

Connie Rebert

Sent from my iPhone



From: Daniel Benedict
To: WAM Testimony
Subject: Testimony for SB 2656

Date: Wednesday, February 19, 2014 3:49:50 PM

# Testimony regarding SB 2656

My name is Daniel Benedict and I submit testimony in support of SB 2656 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 by 2020.

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.

SB 2656, should be strengthened so that HECO, which holds a monopoly on electrical power, meets deadlines set by the PUC and the state legislature. HECO should not be allowed to delay by setting its own time table for modernization of the grid to allow for 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 Waialua HI 96791

To: WAM Testimony
Cc: dspitzrealtor@gmail.com

**Subject:** \*Submitted testimony for SB2656 on Feb 20, 2014 09:05AM\*

Date: Wednesday, February 19, 2014 3:20:14 PM



## **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Danielle Spitz	Individual	Support	No

#### Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony

Cc: panther\_dave@yahoo.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Wednesday, February 19, 2014 11:33:39 PM



#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Dave Kisor	Individual	Support	No

Comments: It isn't our fault the electrical monopoly never prepared for the eventuality of so many of its customers going solar, wind powered or some other method of generating their own electricity. They put out the RFP, which meant they should have been able to accept a lot more power than an island full of solar panels, so what was their logic there, unless all of those geothermal companies were never intended to provide power to the grid. We know they weren't, because they were intended to provide cheap power to industry, so that whole thing was a boondoggle. I support strengthening SB2656 to give stronger policy direction to the PUC. I live in lower Puna, where we lose power whenever it's windy. I'm told Hilo gets their power back on ASAP, but in the hinterlands, don't count on it so soon. We need to bust up the large grid and go with mini and micro community based renewable power grids for those not generating their own power.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

To: WAM Testimony
Cc: djp@kona.net

**Subject:** \*Submitted testimony for SB2656 on Feb 20, 2014 09:05AM\*

Date: Thursday, February 20, 2014 7:10:33 AM



## **SB2656**

Submitted on: 2/20/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Doug Phillips	Individual	Support	No

#### Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony
Cc: dmpase@gmail.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 3:46:25 PM



#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Douglas Pase	Individual	Comments Only	No

Comments: Esteemed legislators, solar energy represents an abundant resource in the islands, an opportunity for growth, for energy independence, and for the long term reduction of energy costs. Even at full retail cost with no subsidies, over the life of the cells, the cost is less than one quarter (\$0.10 vs. \$0.43 per kilowatt hour) that of current energy. With investment from the state and federal governments, this cost can be even lower. My own solar array cost \$16,000 before subsidies and will generate about 140 MWh over its life, or about \$0.10 per KWh. After subsidies that price dropped to about \$0.04 per KWh. This is affordable, but the current HECO rate of \$0.43 per KWh is not. Strengthening the grid helps everyone. Spending hundreds of millions of dollars on expensive geothermal generation plants hurts those who live near the plant and helps no one but HECO. Please, do the right thing for the people. Strengthen the grid, support solar expansion and bring energy costs down for everyone.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



I wish to testify concerning [bill]. I am an individual who supports [bill], 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.



To: WAM Testimony
Cc: gary@alohaaku.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Wednesday, February 19, 2014 12:57:25 PM

# **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Mr Gary Passon	Individual	Comments Only	No

Comments: I support this bill only if it gives more direction to support solar and/or a tight timetable. We need more solar NOW.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony
Cc: sairam2@hawaiiantel.net

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 3:43:53 PM

# **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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

Comments: This is a good bill but needs to be stronger in directions given to the PUC to figure policy on Solar installations Electric Rates are sky rocketing and HECO is dragging its feet or maybe out right obstructing Roof top Solar to the average home owner. The time is ripe force their hand be strong geoff Last

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony

Cc: <a href="mailto:info@localonlinereservations.com">info@localonlinereservations.com</a>

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Wednesday, February 19, 2014 3:06:57 PM



# **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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 <u>less than 24 hours prior to the hearing</u>, 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.



 From:
 Gloria Adams

 To:
 WAM Testimony

 Subject:
 SB2526

Date: Wednesday, February 19, 2014 7:37:53 PM

I support the original form of SB 2656 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 interconnection 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 the original version of SB 2656. I support the intent of the bill but feel it should be returned to it's original form.

Thank you. Gloria Adams



From: **Harvey Arkin WAM Testimony** To:

Subject:

Date: Wednesday, February 19, 2014 11:38:58 PM



#### SB 2656

- 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 Anoai Pl Honolulu, HI 96822 alohaxtc@hawaii.rr.com



To: WAM Testimony
Cc: jlouis@hawaii.edu

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Thursday, February 20, 2014 6:13:49 AM

#### **SB2656**

Submitted on: 2/20/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Jamie Louis	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.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



From: <u>Janice Palma-Glennie</u>
To: <u>WAM Testimony</u>

Subject: Support solar and grid modernization

Date: Wednesday, February 19, 2014 1:15:05 PM

Support HB 1943 Strengthen SB 2656

Aloha.

Two grid modernization bills will be heard tomorrow (<u>SB 2656</u>, and <u>HB 1943</u>). 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

To: WAM Testimony
Cc: mendezj@hawaii.edu

**Subject:** \*Submitted testimony for SB2656 on Feb 20, 2014 09:05AM\*

Date: Wednesday, February 19, 2014 4:43:00 PM



## **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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

## Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

To: WAM Testimony
Cc: jerikim@hawaii.rr.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Wednesday, February 19, 2014 4:35:11 PM



# **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Jerilynn Kim	Individual	Support	No

Comments: I am waiting to install solar panels because HECO is delaying and interfering with this process. HECO has repeatedly failed to demonstrate a plan to accommodate rooftop solar. The Public Utilities Commission needs to implement a plan that is fair to all of HECO's customers.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

To: WAM Testimony
Cc: johnburhop@gmail.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Thursday, February 20, 2014 7:03:24 AM



## **SB2656**

Submitted on: 2/20/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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

Comments: just do it

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony
Cc: jgelert@yahoo.com

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 4:58:16 PM



## **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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 <u>less than 24 hours prior to the hearing</u>, 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.





#### **TESTIMONY SUPPORTING SB 2656, SD 1**

To: Honorable David Y. Ige, Chair, Senate Committee on Ways and Means

From: SolarCity

Hearing on Feb. 20, 2014, at 9:05 a.m., Room 211

Aloha Chair Ige, Vice Chair Kidani, and Members of the Committees:

Thank you for the opportunity to provide testimony supporting SB 2656, SD1, 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 20<sup>th</sup> century grid has failed to keep up with 21<sup>st</sup> 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.

SB 2656, SD 1 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. However, we believe that the public interest will best be served by giving citizens the ability to install rooftop solar regardless of where they live.

Thank you for the opportunity to testify in support of SB 2656, SD1.

Mahalo,

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

To: WAM Testimony
Cc: wao-hsl@WeAreOne.cc

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Thursday, February 20, 2014 9:17:44 AM



#### **SB2656**

Submitted on: 2/20/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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 <u>less than 24 hours prior to the hearing</u>, 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.

From: KEALIA GEDAYLOO-SUDDEN

To: WAM Testimony
Subject: In support of SB 2656

Date: Wednesday, February 19, 2014 1:52:39 PM



Aloha! I support SB 2656! Please help Hawaii become solar! Do it for the kids!



To: WAM Testimony
Cc: kpterra@gmail.com

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 5:27:32 PM



# **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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. But I worry about the PUC's involvement in this. I urge you to keep major authority to ensure that this all gets done in a timely and effective way.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

Laura & Josh Kaakua Honolulu, Hawaii

Re: Support of SB 2656



Aloha,

We support SB 2656 to allow all of us to choose a cleaner and cheaper energy option. We are in the process of renovating a home that will house four generations. With many people living in the house, we expect our energy bills to be large, and we would like to install solar to decrease our future energy bills. We are concerned that if we install solar we will not be able to utilize our solar system due to the antiquated grid. We support grid modernization so that Hawaii can be a clean energy leader and so that we all may contribute to a greener Hawaii through solar.

Mahalo,

Laura and Josh Kaakua



I support SB2656 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.



#### In support of SB 2656

#### 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!



To: WAM Testimony
Cc: mheidel808@icloud.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Thursday, February 20, 2014 3:24:01 AM

#### **SB2656**

Submitted on: 2/20/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Marian Heidel	Individual	Comments Only	No

Comments: 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 think it is important that government, businesses, utilities and all the people should promote the use of non-fossil fuel energy as much as possible. The opportunity to use the power of the sun should be made as easy as possible. Especially it should be made available to those with low income, so that they can have lower bills. Marian Heidel

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony
Cc: mpshaw10@gmail.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 9:11:51 PM

#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	<b>Testifier Position</b>	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 a small 2kw solar system and wish to add an additional 2kw of solar but was informed my area could not add any additional solar without a study that would cost more than the new system. Now what do I do?

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony
Cc: mark@marksheehan.com

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 4:45:32 PM

#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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

Comments: We have high utility costs, up 50% since 2009. MECO and HECO have done little to upgrade their grid and have made solar installations very difficult. Pass this bill so we can get off our oil dependency.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



 From:
 Mary Groode

 To:
 WAM Testimony

 Subject:
 Bill SB 2656

Date: Wednesday, February 19, 2014 4:36:38 PM

#### Aloha,

I am writing as an individual. I care about solar power being available to the citizens of Hawaii. I am in support of the original version of SB 2656.

- 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 <u>average residential electricity rates have gone up by more than 50%!</u> 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 your kokua, Mary Groode P.O. Box 1551 Kihei, HI 96753

To: WAM Testimony
Cc: mkelley323@gmail.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 4:50:04 PM



#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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

Comments: I support strengthening SB 2656 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 <u>less than 24 hours prior to the hearing</u>, 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.

To: WAM Testimony

Cc: <u>mlieberman1@hawaiiantel.net</u>

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 7:00:48 PM



#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Michael Liebeman	Individual	Support	No

Comments: Solar has been a major, sustainable economic engine for Hawaii. People should have the ability to pursue cleaner and cheaper options. Not only would this bill help individuals, but also the environment for all of us.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

From: <u>Ninu-Alexandri Quirk</u>
To: <u>WAM Testimony</u>

Subject: SUPPORT ROOFTOP SOLAR - Strengthen SB2656

Date: Wednesday, February 19, 2014 1:29:23 PM



### Dear Senators,

Please strengthen SB2656.

# It is important to GIVE THE PUC CLEAR DIRECTIONS THAT SUPPORT ROOFTOP SOLAR.

When there was the big earthquake in 2007 and the tsunami in 2011, we still had solar power, even when other people on the grid lost power for days. Solar energy makes Hawaii strong. Solar is a big part of our economy, and we should expand that sector, rather than make the electric company and even bigger monopoly than it already is. Highest electric bills in America here in HI. PLEASE SUPPORT ROOFTOP SOLAR.

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

Thank you for your consideration,

Ninua Quirk, Hawaii resident and Solar Consumer



From: Paul E. Spencer on behalf of Sun King Inc.

 To:
 WAM Testimony

 Cc:
 FINTestimony

 Subject:
 SB2656 and HB1943

Date: Wednesday, February 19, 2014 1:55:59 PM

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

In 2010 my electric usage was



 From:
 Pete Wilson

 To:
 WAM Testimony

 Subject:
 in support of SB 2656

Date: Wednesday, February 19, 2014 11:08:18 PM

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 21<sup>st</sup> 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 for SB 2656.

Sincerely,

Pete Wilson

13-927 Kahukai Street

Pahoa, HI 96778



From: Richard Koob To: **WAM Testimony** Cc: lj@kalani.com

Subject: Support SB2656 and sustainably solarize Hawaii Date: Wednesday, February 19, 2014 8:06:28 PM

#### Aloha WAM Committee senators:

Please support SB2656 and allow for increased sustainable solar energy throughout Hawaii.

- For 40 years Kalani educational retreat has thrived with renewable energy, conservation and shared resource systems. Through net metering our 350 solar panels even help provide for local communities. We have proven that switching to solar can be a boon for the environment and the economy, for now and generations to come – helping Hawai'i attain the State's 2050 Sustainability Goals.
- Residents 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.
- 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.



Ricky Thriving with sustainable agriculture and forms of renewable energy for 67 years

Founder, Director Emeritus: KALANI Oceanside Retreat Village

Secretary: Hawaii Koob family partnerships, Retreat Village at Kalani Kai LLC and Kalani Mauka LLC

808-965-0468 X104; Art: www.kalani.com/about/founder; Free book: E Ho Mai

12-6860 Kalapana-Kapoho Beach Road, Pahoa, HI 96778

KALANI Reservations 800-800-6886 www.KALANI.com

Collaborating to provide Hawaii-Nature-Culture-Wellness-Sustainability education since 1975

"Be the change you want to see in the world." - Gandhi

CONFIDENTIAL COMMUNICATION. This e-mail is intended only for the addressee(s), and may contain confidential information that is privileged. If you are not the intended recipient, or an agent responsible for delivery of this message to the intended recipient, then you have received this message in error, and any review, dissemination or copying of this message is strictly prohibited. If you have received this message in error, please notify the sender immediately by telephone or e-mail and return this message and any accompanying attachments to the sender by mail.

To: WAM Testimony
Cc: richkoob@kalani.com

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 8:09:00 PM



Submitted on: 2/19/2014

**SB2656** 

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Koob	Kalani educational retreat	Support	No

Comments: Please support SB2656 and allow for increased sustainable solar energy throughout Hawaii. • For 40 years Kalani educational retreat has thrived with renewable energy, conservation and shared resource systems. Through net metering our 350 solar panels even help provide for local communities. We have proven that switching to solar can be a boon for the environment and the economy, for now and generations to come – helping Hawai'i attain the State's 2050 Sustainability Goals. • Residents 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. • 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.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.







## SENATE COMMITTEE ON ENERGY & ENVIRONMENT SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

February 4, 2014, 2:45 P.M. (*Testimony is 2 pages long*)

#### **TESTIMONY IN SUPPORT OF SB 2656**

Aloha Chair Gabbard, Chair Baker, and Members of the Committees:

The Sierra Club, Hawaii Chapter, with over 12,000 dues paying members and supporters statewide, *strongly supports* SB 2656. 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. 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.

<sup>&</sup>lt;sup>1</sup> 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 Hawaii's renewable energy generation in 2012 and and 26% of all construction expenditures. 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."<sup>3</sup>

#### 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.

Mahalo for the opportunity to testify.

<sup>&</sup>lt;sup>2</sup> http://energy.hawaii.gov/wp-content/uploads/2011/10/FF\_June2013\_R2.pdf

<sup>&</sup>lt;sup>3</sup> 2013 Integrated Resources Planning Report, June 28, 2013, page ES-6. Available online at: <a href="http://www.hawaiianelectric.com/vcmcontent/IntegratedResource/IRP/PDF/IRP\_2013\_Report-Executive-Summary-Transmitta-Letter.pdf">http://www.hawaiianelectric.com/vcmcontent/IntegratedResource/IRP/PDF/IRP\_2013\_Report-Executive-Summary-Transmitta-Letter.pdf</a>



From: Robert Watkins
To: WAM Testimony

Subject: SB2656

Date: Wednesday, February 19, 2014 9:25:54 PM

It is so important for individuals to install solar, to help the Earth and to lower our oh so high electric bills.

Sent from my iPad



To: WAM Testimony

Cc: ron@solarinspectorshawaii.com

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 3:42:39 PM

Attachments: <u>HECO testimony 2-19-14.docx</u>

#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing	
Ron Hooson	Individual	Support	Yes	

Comments: 100% of Daily Minimum Load is a Red Herring stall tactic as were the 15%, 25% and 75% Red Herrings. We need to get off of Fossil fuels for electricity now. HECO is stopping that effort.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



## TESTIMONY BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

S.B. No. 2656 SD1

#### RELATING TO THE MODERNIZATION OF THE HAWAII ELECTRIC SYSTEM

February 20, 2014 9:05 am State Capitol, Conference Room 211

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

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

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

We support the intent of SB 2656 SD1 to open a Public Utilities Commission review of technical, policy and economic issues associated with modernization of the electric grid, including but not limited to, customer-owned distributed generation. This proceeding should not be constrained by statutory language that would bind the Commission and set unrealistic expectations for our customers; rather, we support a PUC review through a broader lens that considers the value of customer generation as part of a broader energy resource mix that includes, but is not limited to, utility scale renewable generation, demand response, and energy storage. The intent and goal of the Commission review would be to maximize benefits and minimize costs to all customers, not just those with photovoltaics.

Thank you for this opportunity to testify.



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 <u>average residential electricity rates have gone up by more than 50%!</u> 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.

To: WAM Testimony

Cc: <u>shannonkona@gmail.com</u>

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 6:26:48 PM



#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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

Comments: Support.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



To: WAM Testimony
Cc: davidsher@juno.com

**Subject:** Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

Date: Wednesday, February 19, 2014 9:37:49 PM

#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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

Comments: Aloha. Please pass this bill to ensure that everyone can enjoy the benefits of rooftop solar in the future. Please also support strengthening SB 2656 to give stronger policy direction to the PUC.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

 From:
 Steve Canham

 To:
 WAM Testimony

 Subject:
 Support of SB 2656

Date: Wednesday, February 19, 2014 1:23:00 PM



I write in support of SB 2656. 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 inablilties 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: <u>Tlaloc Tokuda</u>

 To:
 WAM Testimony; FINTestimony

 Subject:
 FW: SB 2656 & HB 1943

Date: Wednesday, February 19, 2014 10:54:38 PM

From: tlaloctt@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.

# 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. Mark J. Hashem
Rep. Kaniela Ing
Rep. Jo Jordan
Rep. Bertrand Kobayashi
Rep. Nicole E. Lowen
Rep. Dee Morikawa
Rep. Rep. Rep. Rep. Rep. Gregg Takayama
Rep. James Kunane Tokioka
Rep. Justin H. Woodson
Rep. Kyle T. Yamashita
Rep. Beth Fukumoto
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, <u>ulrichbonne@msn.com</u>, 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** (LGLPV**BB**), 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  $\underline{immediately}$  (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 <u>plain PVs</u> (which collectively may cause grid overload), lower MMCs for <u>LGLPVBBs with NEM and FIT contracts</u>

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, <a href="http://alohafuels.pbworks.com/f/PB-13-MMC.pdf">http://alohafuels.pbworks.com/f/PB-13-MMC.pdf</a>
- [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 <u>peak PV output power</u>, 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.



To: WAM Testimony
Cc: arbeit@hawaiiantel.net

Subject: Submitted testimony for SB2656 on Feb 20, 2014 09:05AM

**Date:** Wednesday, February 19, 2014 10:04:11 PM

#### **SB2656**

Submitted on: 2/19/2014

Testimony for WAM on Feb 20, 2014 09:05AM in Conference Room 211

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. The PUC has not shown itself to be a watchdog for the public. Please re- adopt language to insure stronger Legislative oversight

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.



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 SB 2656.