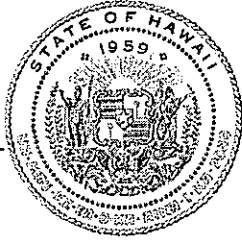


SB 366

RELATING TO ENERGY.

Prohibits utilities from charging consumers a fee for interconnection studies. Requires approval of interconnection for photovoltaic systems with rated output of ten or fewer kilowatts, after necessary reviews or studies, if the total existing or planned cumulative photovoltaic kilowatt output is at or below seventy-five per cent of the circuit's daily minimum load.



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

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
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Statement of
Richard C. Lim
Director
Department of Business, Economic Development, and Tourism
before the
Senate Committee on Energy and Environment
Tuesday, February 5, 2013
2:45 PM
State Capitol, Conference Room 225

in consideration of

SB 366 RELATING TO RENEWABLE ENERGY.

Chair Gabbard, Vice Chair Ruderman, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports the intent of SB 366, which prevents consumers from being charged a fee for any interconnection study required to connect to the Hawaii electric system. This bill also mandates that photovoltaic (PV) systems of 10 kw or less shall be approved after any reviews or studies required by the commission if the total existing or planned cumulative PV output is at or below 75% of the circuit's daily minimum load.

We support the intent of this bill because it will likely encourage the adoption of renewable energy systems seeking to connect to the Hawaii electric system; thus, helping the State meet its clean energy objectives.

We respectfully defer to the Public Utilities Commission for comment on the effects this bill would have on both electrical grid stability as well as the impact to ratepayers.

Thank you for the opportunity to offer these comments.

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

FEBRUARY 5, 2013
2:45 p.m.

MEASURE: S.B. No. 366
TITLE: Relating to Energy

Chair Gabbard and Members of the Committee:

DESCRIPTION:

This measure proposes to eliminate all interconnection study fees for persons seeking to make an interconnection to the Hawaii electric system, as defined under Part IX, Chapter 269, Hawaii Revised Statutes. S.B. No. 366 would also require automatic approval of interconnection applications by any owner, user, or operator of photovoltaic ("PV") systems ten kilowatts ("kW") or less, so long as the "total existing or planned cumulative [PV kW] output is at or below seventy-five per cent of the circuit's daily minimum load." The bill also defines "consumers" as any person seeking an interconnection that is not a "business, organization, or other entity."

POSITION:

The Commission has strong concerns with this measure because of the potential negative impacts to both ratepayers and the reliability of the Hawaii electric system. The following comments are offered for the Committee's consideration.

COMMENTS:

The Commission has serious concerns about how necessary interconnection study fees would be passed on to businesses, organizations, and other captive individual ratepayers who cannot place a renewable energy device on their homes or facilities. Interconnection studies are important for ensuring the reliable operation of the State's grids, and these studies can be costly, depending on the specifics of the interconnection

being sought. Someone must bear the costs for these necessary studies, and it is unclear from the language of this measure how non-participating ratepayers will be affected.

As a general principle, the Commission prefers to address issues affecting interconnection affecting reliability and safety issues through existing regulatory procedures because operational conditions can change quickly due to evolving technology in the electricity sector. The Commission, through various proceedings, has invested time and resources working with technical experts and stakeholders to revise and update interconnection rules and procedures. Modeled after the progressive California Rule 21, Hawaii's Rule 14-H incorporates current technical best practices to ensure reliability and safety. This measure is without such analysis, and is unclear and ambiguous.

Finally, a Commission-initiated stakeholder group ("Reliability Standards Working Group" or "RSWG") just completed an intensive process reviewing existing reliability standards and interconnection procedures for PV systems and other types of renewable energy. Of note, during the RSWG electric utility planning, staff and representatives of the PV industry began working on new, "proactive" planning and interconnection procedures for PV projects. While the final report will be submitted to the Commission for decision making in the near future, the Commission cites the efforts of this group as a successful example of the regulatory process resolving the complex issues involved in interconnection policies.

Thank you for the opportunity to testify on this measure.



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

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HONOLULU, HAWAII 96809

Phone Number: 586-2850

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KEALI'I S. LOPEZ
DIRECTOR

JO ANN UCHIDA TAKEUCHI
DEPUTY DIRECTOR

TO THE SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

THE TWENTY-SEVENTH LEGISLATURE
REGULAR SESSION OF 2013

TUESDAY, FEBRUARY 5, 2013
2:45 P.M.

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

SENATE BILL NO. 366 - RELATING TO ENERGY

DESCRIPTION:

This measure proposes to prohibit utilities from charging consumers a fee for interconnection studies; requires approval of interconnection for photovoltaic systems with rated output of ten or fewer kilowatts, after necessary reviews or studies, if the total existing or planned cumulative photovoltaic kilowatt output is at or below seventy-five percent of the circuit's daily minimum load.

POSITION:

The Division of Consumer Advocacy (Consumer Advocate) respectfully opposes S.B. No. 366 and offers the following comments.

COMMENTS:

The Consumer Advocate understands the frustration that some residential consumers have faced when told by the electric utility that the consumer would have to pay for an interconnection study before the consumer would be allowed to install a solar

photovoltaic ("pv") system. This bill would prevent the electric utility from charging the consumer for such a study.

Thus far, solar pv systems have been available to those who are affluent enough to pay the significant up front installation costs for such systems. In general, these systems have not been affordable by low to moderate income homeowners and renters. Furthermore, high-rise condominium dwellers are also precluded from enjoying the cost-savings benefit of solar pv systems. Therefore, if the electric utility is unable to ask the consumer who is seeking to install the solar pv system to pay for an interconnection study, then that cost is likely to be shared by all other consumers who do not have solar pv systems. The Consumer Advocate must represent the interests of all consumers. The Consumer Advocate asks that the Legislature consider the detrimental impact of the cost shift of these interconnection studies from the consumer applying for the system to all other consumers, especially to those who can least afford it, if S.B. No. 366 is passed.

The second part of this bill requires the approval of the interconnection of a proposed solar pv system that is ten kilowatts or less in rated output, if after reviews or studies as required by the Public Utilities Commission ("PUC"), the proposed system output would be at or below 75% of the circuit's daily minimum load. The Consumer Advocate has questions and concerns with respect to this proposed provision. First, it is not clear who is required to make the approval – the PUC or the electric utility? Second, the bill refers to "reviews or studies required by the commission." It is not clear to what reviews or studies are being referred. Interconnection reviews or studies are required by the electric utility, not the commission. Third, the bill refers to 75% of the circuit's minimum "daily" load. It is not clear whether the term "daily" is referring to the 24 hour day. Hawaiian Electric Company, Inc.'s Net Energy Metering ("NEM") Express program refers to 75% of the minimum "daytime" load. In residential areas, the minimum daytime load would be greater than the minimum daily load (assuming a 24 hour day), thus allowing a greater number of NEM customers on the system if a daytime standard were to be applied.

Under these circumstances, the Consumer Advocate respectfully opposes S. B. No. 366.

Thank you for this opportunity to testify.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Before the Senate Committee on Energy and the Environment
February 5, 2013, 2:45 PM, Conference Room 225
SB 366: RELATING TO ENERGY

Aloha Chair Gabbard, Vice-Chair Ruderman, and members of the Senate Committee on Energy and the Environment,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify **in support of SB 366**, which prohibits utilities from charging consumers a fee for an interconnection study under certain circumstances. 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 71 companies, and our members include installers, contractors, manufacturers, distributors, the utility, and others. With 35 years of advocacy behind us, HSEA's goal is to work for a sustainable energy future for all of Hawaii.

Solar is key to our green energy future

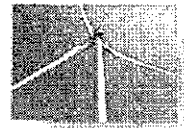
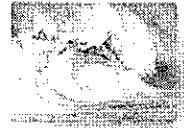
Hawaii is dangerously dependent upon imported fossil fuels, and the cost and uncertainty of fossil fuels will only increase. Recent reports have indicated that oil may reach \$180/barrel or more by 2020, and transforming our electrical grid to a green energy infrastructure will bring both added security and stability to our state's economy, and contribute to an overall reduction of greenhouse gasses for everyone.

Streamline installations for PV systems of 10kW and below

Last year, MECO revised the standards used to determine when a fee may be charged to conduct an interconnection study on its system. The standard cost for this study is \$3,000. After field testing, MECO relaxed the standard for PV systems of 10kW or less so that a system may be installed without conducting an interconnection study if the system is less than 75% of the circuit's minimum daily load. The previous standard required an interconnect study if the system was 50% of the minimum daily load or greater. SB 366 would make this new metric standard for the entire utility. It makes sense to adopt a utility wide standard to ease systems of 10kW or less onto the grid without an onerous \$3,000 study.

Thank you for the opportunity to testify.

Leslie Cole-Brooks
Executive Director
Hawaii Solar Energy Association



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 5, 2013, 2:45 P.M.

Room 225

(Testimony is 3 pages long)

TESTIMONY IN SUPPORT OF SB 366, PROPOSED AMENDMENTS

Chair Gabbard, Vice-Chair Rudeman, and members of the Committee:

The Blue Planet Foundation supports the intent of SB 366, and provides these comments in hope of helping to better achieve that intent. In particular, we suggest two amendments (described below) to make SB 366 fairer for renters and low-income households, and to make it more effective.

It appears that SB 366 intends to make it easier for Hawaii residents to install grid-tied renewable energy systems. SB 366 prohibits a fee for consumer interconnection studies, and it requires that the utility interconnect photovoltaic systems when the current or planned generating capacity on the relevant circuit is less than 75% minimum daily load. With both of these measures, SB 366 incentivizes the utility to take steps to ensure that the grid is modernized and operated such that it can accommodate consumers' distributed renewable generation. These are all positive steps toward Hawaii's energy independent future.

However, Blue Planet has concerns about two portions of SB 366, which may make its operation unfair and ineffective. Because of the extreme importance of encouraging distributed renewable energy generation, we respectfully urge the committee to forward the bill with amendments as follows:

1. The Definition of "Consumer" Must Be Expanded (a) Because it is Unfair to Renters, Low-Income Households, and Other Residents, and (b) Because it May Limit the Effectiveness of SB 366.

Blue Planet fears that the definition of "consumer" is too narrow, because it excludes all entities and organizations. This means, for example, that a home owned in the name of a family trust (or any other entity) will not be protected by SB 366. Similarly, landlords who own a rental property

info@blueplanetfoundation.org

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in the name of their business will not be covered by SB 366. In this way, SB 366 unfairly penalizes renters, and excludes them from renewable energy opportunities. And by including fewer Hawaii residents, SB 366 misses an opportunity to expand renewable distributed energy generation.

The definition of “consumer” will also unfairly penalize residents with lower household income. Blue Planet has studied building permits issued by the City and County of Honolulu for solar energy system, finding that neighborhoods adding solar energy the fastest in 2012 also typically reported lower average household income than other areas with high solar PV penetration. This energy revolution is allowing more and more residents to escape high energy prices with renewable energy. However, it also appears that this expansion is made possible in part because of innovative solar financing models that do not require consumers to pay up-front equipment costs. Instead, the equipment may be leased, and the power is purchased from the solar company at a fixed rate (less than the HECO rate). Notably, residents utilizing these programs would be excluded by SB 366, because the solar system is typically owned by the solar company, not an individual.

Rather than unfairly and improperly restricting “consumers” in this way, SB 366 should harmonize its two new sections, by prohibiting an interconnection fee for all systems under 10 kW in size, on circuits satisfying the minimum load standard. Such systems are smaller than virtually all commercial energy systems, thus preserving SB 366’s apparent intent to protect individual residents.

This solution can be accomplished with a simple language change:

Interconnection study fees. No fee for any interconnection study shall be charged ~~to any consumer seeking to make for~~ making an interconnection on the Hawaii electric system for any renewable energy system satisfying section herein.

(note that the indicates the section number designated for SB 366’s next proposed section)

2. The Minimum Load Standard Should be a Floor, to Allow for Future Improvement. And SB 366 Should Apply to All Renewable Energy Systems Less than 10 kW.

The second part of SB 366 similarly requires amendments, for three reasons.

First, while the 75% minimum load standard is appropriate and is consistent with recent investigations into Hawaii’s electric system, that is the *minimum* acceptable standard. For

example, we understand that some circuits on Kauai already accept renewable generation of more than 100% of minimum load. As the electric grid is modernized, the 75% standard will become outdated. Thus, SB 366 should provide a mechanism for the Public Utilities Commission to increase that minimum load standard at regular intervals as appropriate.

Second, SB 366 should not be limited to photovoltaic energy systems. Any resident's renewable energy system of 10 kW or less should have equal access to the grid.

Third, SB 366 suggests that interconnection shall be approved "after any reviews or studies required by the commission." The scope of the commission's role is highly ambiguous with this language. And because the commission already regulates the electric system, this language is not necessary.

These problems can be addressed with revised language:

~~Photovoltaic~~ Renewable energy systems of ten kilowatts or less in rated output; interconnection approval. Owners, users, and operators of ~~photovoltaic~~ renewable energy systems of ten kilowatts or less in rated output seeking interconnection on the Hawaii electric system shall be approved, ~~after any reviews or studies required by the commission,~~ if the total existing or planned cumulative ~~photovoltaic~~ renewable energy kilowatt output for the relevant circuit is at or below seventy-five per cent of the circuit's daily minimum load. The commission shall annually, and upon the petition of any individual, group, or entity, review this minimum daily load standard and revise it upward as appropriate for each island's electric system or a portion thereof.

We respectfully urge the committee to make these important changes to SB 366, and to forward the bill.

Thank you for this opportunity to testify.

SB366

Submitted on: 2/2/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Petricci	Puna Pono Alliance	Support	No

Comments: Feb 5, 2013 2:45 PM RE: SB366 Strong Support Aloha Senator Gabbard and committee members. Puna Pono Alliance supports clean, safe, reliable, disbursed, renewable, community friendly solar power. SB366 moves Hawaii in the right direction. Looking to distributed power generation and 21st century technology to propel Hawaii into energy independence. We like this for many reasons but notably because disbursed solar generation is community friendly. Communities welcome this new age power generation. We see solar power as the the most promising choice for Hawaii's energy future. Solar power is also the most versatile option going forward. It would allow for a gradual retraction and phasing out of the grid. With minimum conversion cost to convert installed systems to independent and stand alone production as storage systems catch up with the panel technology, or as the grid itself becomes more obsolete and prohibitively expensive. The high cost associated with maintaining antiquated distribution systems is a drag on our economy. Maintaining and upgrading inefficient distribution systems keeps our rates high and takes money that should be allocated to other areas of our economy to maintain what really is an out dated business model. Solar technology prices are crashing, the advances are coming so fast that last year we saw a 50% drop in the cost of panels, that followed a 27% drop the year before. No other energy source can come close to that, we expect that trend to continue. Further Hawaii is blessed one of the best solar resources on the planet. With the combination of high rates and our premium solar resource added to the crashing cost of solar power we are perched a top a perfect storm for real meaningful reductions in the cost of electrical power for our businesses and residents, that at the same time will improve our environment tremendously boosting the economy even more. Hawaii should be leading this solar economic revolution not playing catch up, held back by outdated corporate business models that simply can not compete or keep up. Energy policy in Hawaii should be about what is best for our people, not the energy monopoly that has led us to the highest rates in the country. It's not our job to continually bail out the corporate power monopoly, it's our job to lead Hawaii into the future with clean truly affordable power. SB366 leads us in the right direction. Please support SB366 Robert Petricci President Puna Pono Alliance

Aloha Senator Gabbard and committee members.

Puna Pono Alliance supports clean, safe, reliable, disbursed, renewable, community friendly solar power. SB366 moves Hawaii in the right direction. Looking to distributed power generation and 21st century technology to propel Hawaii into energy independence.

We like this for many reasons but notably because disbursed solar generation is community friendly. Communities welcome this new age power generation. We see solar power as the the most promising choice for Hawaii's energy future.

Solar power is also the most versatile option going forward. It would allow for a gradual retraction and phasing out of the grid. With minimum conversion cost to convert installed systems to independent and stand alone production as storage systems catch up with the panel technology, or as the grid itself becomes more obsolete and prohibitively expensive.

The high cost associated with maintaining antiquated distribution systems is a drag on our economy. Maintaining and upgrading inefficient distribution systems keeps our rates high and takes money that should be allocated to other areas of our economy to maintain what really is an out dated business model.

Solar technology prices are crashing, the advances are coming so fast that last year we saw a 50% drop in the cost of panels, that followed a 27% drop the year before.

No other energy source can come close to that, we expect that trend to continue. Further Hawaii is blessed one of the best solar resources on the planet. With the combination of high rates and our premium solar resource added to the crashing cost of solar power we are perched a top a perfect storm for real meaningful reductions in the cost of electrical power for our businesses and residents, that at the same time will improve our environment tremendously boosting the economy even more.

Hawaii should be leading this solar economic revolution not playing catch up, held back by outdated corporate business models that simply can not compete or keep up. Energy policy in Hawaii should be about what is best for our people, not the energy monopoly that has led us to the highest rates in the country.

It's not our job to continually bail out the corporate power monopoly, it's our job to lead Hawaii into the future with clean truly affordable power. SB366 leads us in the right direction.

Please support SB366

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Mojo Mustapha	Hedonisia Hawaii Sustainable Community	Support	No

Comments: Aloha Senator Gabbard and committee members. Please support this effort to propel Hawaii into energy independence. We like this for many reasons but notably because disbursed solar generation is community friendly. Communities welcome renewable power generation. We see solar power as the the most promising choice for Hawaii's energy future. Solar power is also the most versatile option going forward. It would allow for a gradual retraction of the current grid and perhaps lead to a newer smart grid. The high cost associated with maintaining antiquated distribution systems is a drag on our economy. Maintaining and upgrading inefficient distribution systems keeps our rates high and takes money that should be allocated to other areas of our economy to maintain what really is an out dated business model. Solar technology prices are crashing, the advances are coming so fast that last year we saw a 50% drop in the cost of panels, that followed a 27% drop the year before. No other energy source can come close to that, we expect that trend to continue. Further Hawaii is blessed one of the best solar resources on the planet. With the combination of high rates and our premium solar resource added to the crashing cost of solar power we are perched a top a perfect storm for real meaningful reductions in the cost of electrical power for our businesses and residents, that at the same time will improve our environment tremendously boosting the economy even more. Hawaii should be leading this solar economic revolution not playing catch up, held back by outdated corporate business models that simply can not compete or keep up. Energy policy in Hawaii should be about what is best for our people, not the energy monopoly that has led us to the highest rates in the country. It's not our job to continually bail out the corporate power monopoly, it's our job to lead Hawaii into the future with clean truly affordable power. SB366 leads us in the right direction. Please support SB366 Mojo Mustapha Community Director Hedonisia Hawaii Sustainable Community

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Clive Cheethqm	Koa'e Community Association	Support	No

Comments:

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Krishna Davinci	Citizens for Real Government	Comments Only	Yes

Comments: Vested interests are keeping us attached to oil. Zero-point energy is the best. It's free & therefore suppressed. However, the Big Island has vast areas of relatively flat lava flow on which similarly vast arrays of solar collectors can be built. Photovoltaic cells can be constructed from scratch for about 1/10th the cost of what Shell Oil charges for its solar-electric systems. This would put many currently unemployed people to work, cut the cost of electricity dramatically, require almost no maintenance, end our fragile reliance on imported oil, & be a sound investment in Hawaii's future growth.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Donna Worden	Kohala Health Library	Support	No

Comments: Corporations such as HELCO and HECO are granted monopolies with the understanding that they will operate not ONLY for their own profit but also for the good of their customers. HELCO and HECO currently send money OUT of Hawaii to purchase energy. Therefore they actually should PAY for the power they receive from those with rooftop solar arrays, et cetera. This bill is a STEP in the right direction and should be approved IN FULL.

SB366

Submitted on: 2/4/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Julia Paul	Pahoa Properties LLC	Support	No

Comments: I support clean, safe, reliable, disbursed, renewable, community friendly solar power. Please support and pass Bill SB366.

SB366

Submitted on: 2/4/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
vincent callagher	Individual	Support	No

Comments: It is time for Solar Power in Hawaii. The prices are falling and advantages far exceed the alternatives. Please pass this bill.

SB366

Submitted on: 2/4/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Dr. Richard A. Rimer D.O.	Individual	Support	No

Comments: Please support the energy development with the lowest cost (3.50 a watt installed), has the lowest maintenance, can be installed on rooftops with existing laws, can be grid tied easily, can be stored for night time use efficiently, has the lowest maintenance and has a pay back of embodied energy of 4 years. The prices are expected to drop more than any other technology. Hawaii is a great solar belt and we should support this green energy over and above all others.

**TESTIMONY BEFORE THE SENATE COMMITTEE ON
ENERGY AND ENVIRONMENT**

S.B. No. 366

Relating to Energy

Tuesday, February 5, 2013
2:45 pm
State Capitol, Conference Room 225

Mathew McNeff
Manager, Renewable Energy Services
Maui Electric Company

Chair Gabbard, Vice Chair Ruderman, and Members of the Committee:

My name is Mathew McNeff representing Hawaiian Electric Company and its subsidiary utilities Maui Electric Company and Hawaii Electric Light Company, collectively "Hawaiian Electric."

S.B. 366, which is companion to H.B.346, would amend H.R.S. 269 to allow any "consumer" to interconnect power generation projects with no cost of interconnection studies or system upgrades. We support and have implemented some of the intended principles of this bill but not in the form presented. We believe this legislation is unnecessary.

S.B. 366 introduces ambiguities as written. For example, the requirement that "no fee for any interconnection study shall be charged to any consumer seeking to make an interconnection on the Hawaii electric system" does not specify whether this is limited to installations 10 kilowatt or less.

Another example of ambiguity in the bill is the qualifying language "after any reviews or studies required by the commission." The bill provides no guidance or criteria on when the Commission would require a review or study. It also suggests that interconnection studies must be specifically required by the Commission. This is contrary to normal utility industry practices as this bill would shift the burden of identifying and addressing integration issues from the utility to the Commission.

As of October 1, 2012, Hawaiian Electric implemented a policy to accommodate most residential and small commercial photovoltaic (PV) projects up to 10 kilowatts in size. Under this policy, there are no costs to applicants for interconnection studies or cost of system upgrades if the generation to circuit's

daytime minimum load ratio is less than 75 percent. Thus, S.B. 366 is unnecessary as it does not improve on this new Net Energy Metering (NEM) policy, and could prevent the new policy from improving with experience.

Thank you for this opportunity to testify.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Michele David	Individual	Support	No

Comments: Aloha Chair Gabbard, Vice Chair Ruderman, and members of the committee, As an environmentalist who has been studying green building, environmental planning, and sustainable development, I support this bill and I encourage your continued support in embracing the best available technologies for energy in Hawaii. Hawaii need not be dependent on imported energy especially because solar and wind are renewable and viable alternatives. Giving consumers a choice to implement solar technologies without charging hefty fees is necessary, especially for lower income homeowners. Mahalo for your support and passing this bill, Michele David Kalapana, Hawaii

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Katarina Culina	Individual	Support	No

Comments:

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Taylor	Individual	Support	No

Comments: I support the use of solar power. It makes so much sense in Hawaii where we have a lot of sun. Solar panels are becoming more affordable. Reduce the use of oil by using the cleanest, most available source we have.

Aloha,

I strongly support the passage of this bill. Solar power is the most environmentally friendly form of energy. The fact that the utility company charges a fee to people who want to have solar power while being connected to their grid is appalling. This makes it so low-income folks cannot switch to solar and promotes the use of fossil fuel.

We have a wonderfully innovative solution right here in Puna. The Hawaii Island Sustainability Organization, aka THIS Organization, provides a Step-By-Step Guide for Beginners, to build solar panels, in their Fall 2012 Issue. For more information go to www.Hisustainability.org or call 965-0368.

Please pass Bill 366.

Sincerely,
Jahnava Baldassarre
12-4295 Kapiolani St.
Pahoa

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Jenna Way	Individual	Support	No

Comments:

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Scott Middlekauff	Individual	Support	No

Comments: Small scale grid tie solar electricity has many advantages, ecological as well as economic. Notably, it is dependable during fuel supply interruptions. Please allow the free market to allow grid tie without unnecessary arbitrary fees.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Delano	Individual	Support	No

Comments: It's our job to lead Hawaii into the future with clean, truly affordable power. SB366 leads us in the right direction.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Susan Douglas	Individual	Support	No

Comments:

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Suzanne Wakelin	Individual	Support	No

Comments:

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Sara Steiner	Individual	Support	No

Comments: Dear Legislature, Solar power is indeed the most renewable non-polluting energy we can have! New technological advances are being made daily, there are solar panels that even collect in the dark, solar shingle and roll-out roof coverings, and it is only getting better. Please realize that this is indeed the way to go, and that it is obscene for HELCO to charge up to \$14,000 for a feasibility study for homeowners to hook into their grid. Thank you for your attention, courtesy and cooperation in this matter! Sincerely, Sara Steiner

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Bogle	Individual	Support	Yes

Comments: Solar power for each and every home or building in the State of Hawaii would effectively reduce expenses to the people. Free up some of that utility money by allowing everyone to have electricity produced by Solar energy gathering systems so the people can spend their money where they need to most, in the local economy.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
ray dittman	Individual	Support	No

Comments: Hawaii should continue to promote solar electricity for all its residents. the installation process should be simplified as much as possible. Photo Voltaics can eliminate the need for additional geothermal wells in Puna or anywhere.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
david balfour	Individual	Support	No

Comments: We must convert our electrical systems to renewables like photo voltaic in a fair and equitable manner.....not discourage this conversion with unnecessary charges.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Graham Ellis		Support	No

Comments: We need to encourage more solar energy in Hawaii. I have lived on Solar power for 26 years and know that it has the potential for providing much more power than at present. Legislative initiatives are essential to do this.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Douglas Orton	Individual	Support	No

Comments: I am in favor of SB 366, please support this bill, Douglas Orton Big Island, Puna, 96778

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Ane Takaha	Individual	Support	No

Comments: Please support natural, sustainable energy for our future

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Dena Smith Givens	Individual	Support	No

Comments: Please support SB366 as it helps move Hawaii forward towards its stated 2050 goal of sustainability. We are very fortunate here in Hawaii to be able to fully harness the power of the sun as a clean, reliable, SAFE, and renewable energy source. Let's take full advantage of that ability!!

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
courtney Bruch	Individual	Support	No

Comments:

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Josephine Keliipio	Individual	Support	No

Comments: I am from Kailua-KOona and I support this bill. Please pass it.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Dea Rackley	Individual	Support	No

Comments: Support the Aina not profit.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
MS Matson	Individual	Support	No

Comments: Strong Support for Senate Bill 366 Hawai'i needs clean, safe, renewable, and well-distributed solar power to lead our energy independence. Clean solar energy contributes to our environment as well as our economy. Solar power is the wisest choice for Hawaii's energy future within not only our residential areas, but within our business districts and for our shopping-mall and industrial-area roof surfaces as well. There are acres upon acres of roofing surfaces that can provide unobtrusive, non-polluting solar energy production. Hawai'i's antiquated distribution systems are not only grossly inefficient, they have become increasingly unaffordable to the general ratepayer! Conversely, solar power systems have become increasingly affordable, mounting to a 77% cost reduction in the past two years. Residential solar energy investments are now in high demand. Optimum clean and affordable energy policy is what is best for Hawai'i's people and our health, welfare, safety and future. Not corporate and industrial greed, pollution and blight. Please pass Senate Bill 366. It is long overdue. MS Matson

SB366

Submitted on: 2/2/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Karen Chun	Individual	Support	No

Comments: This is an important bill that prevents the electric utility from putting unnecessary and expensive roadblocks in the way of homeowners adding PV. The utility limits on PV are either bogus and their only purpose is to maximize utility revenues at the expense of customers who want to install PV or an indication that the grids are so severely backward and archaic that the utility's first priority should be to fix the load balancing problem they have. To deny PV to customers because their grids are supposedly too poorly managed and outdated to accommodate more renewable energy is just plain BACKWARDS.

SB366

Submitted on: 2/2/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Kerri Marks	Individual	Support	No

Comments: Thank you for helping the rate payers help themselves.

SB366

Submitted on: 2/2/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

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

Comments: Big Island. Thank You!

SB366

Submitted on: 2/4/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Harold Stevens	Individual	Support	No

Comments: The high cost associated with maintaining existing electric distribution systems is a drag on our economy. Maintaining and upgrading inefficient distribution systems keeps our rates high and takes money that should be allocated to other areas of our economy to maintain what really is an inefficient and costly business model. Solar technology is clean, safe, and supports Hawai'i self-sustainability and independence. Further Hawaii is blessed one of the best solar resources on the planet. With the combination of high rates and our premium solar resource added to the crashing cost of solar power we are perched a top a perfect storm for real meaningful reductions in the cost of electrical power for our businesses and residents, that at the same time will improve our environment tremendously boosting the economy even more. Hawaii should be leading this solar economic revolution not playing catch up, held back by outdated corporate business models that simply can not compete or keep up. Energy policy in Hawaii should be about what is best for our people, not the energy monopoly that has led us to the highest rates in the country. It's not our job to continually bail out the corporate power monopoly, it's our job to lead Hawaii into the future with clean truly affordable power for everyone. SB366 leads us in the right direction. Please support SB366

SB366

Submitted on: 2/4/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Sheryl K. Palmer	Individual	Support	No

Comments: Support of this bill is a no brainer. HECO's choices are between fuels that pollute and this includes geothermal, and non-polluting solar. HECO should not just be a company trying to make the most money, it is a public utility and should be trying to provide its service to the community in the best possible way. This is a great way.

SB366

Submitted on: 2/4/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Thomas Travis	Individual	Support	No

Comments: End the regressive indirect "tax" on the shift to solar.

The utilities claim that if solar percentage of power generation becomes too large, their grid will become unstable. However, this is a problem can be solved without the indirect "tax" given to utilities when consumers connect to solar power. This "tax" is the connection study, a "tax" that moves Hawaii away from using sustainable energy.

There are technical solutions to adding more solar to the grid, without making the grid unstable. Such solutions are reverse power preventers that do not allow solar from a residence to go supply power to the grid when solar percentage becomes to high and use of weather radar to predict dipping solar demand, allowing the utility to anticipate needs.

But regardless of the technical arguments, the individual wanting to use solar should not be singled out for this "tax." The cost of the study, and I suspect that there is none conducted, should be borne by the utility. Shifting the cost away from the individual solar user will encourage more use of solar and will support the State's clean energy goals. As currently structured, the connection study increases cost of installing solar, discourages the shift to solar, and forces greater use of fossil fuel.

I strongly support prohibiting individual consumers from bearing the cost of what are most likely unnecessary studies, thereby discouraging individuals shifting to solar energy.

SB366

Submitted on: 2/4/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Dennis Davis	Individual	Support	No

Comments:

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Dea Rackley	Individual	Support	No

Comments:

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Felicia Cowden	Individual	Support	No

Comments: I support SB366 as decentralized power systems through solar systems, helps to build Hawaii's resilience in through independence at the unit level. I also agree with the testimony submitted by Robert Petricci of Puna.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Kathleen Carr	Individual	Support	No

Comments: "Vested interests are keeping us attached to oil. Zero-point energy is the best. It's free & therefore suppressed. However, the Big Island has vast areas of relatively flat lava flow on which similarly vast arrays of solar collectors can be built. Photovoltaic cells can be constructed from scratch for about 1/10th the cost of what Shell Oil charges for its solar-electric systems. This would put many currently unemployed people to work, cut the cost of electricity dramatically, require almost no maintenance, end our fragile reliance on imported oil, & be a sound investment in Hawaii's future growth."

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Cory Harden	Individual	Support	No

Comments: Please support this bill to help move Hawai'i away from reliance on fossil fuels.

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Lee Mertins	Individual	Support	No

Comments: Pplease pass this solar bill

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

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

Comments:

SB366

Submitted on: 2/3/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
william collins	Individual	Support	No

Comments:

SB366

SB366

Submitted on: 2/1/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Nancy Davlantes	Individual	Support	No

Comments:

SB366

Submitted on: 2/1/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Steve Hirakami	Individual	Support	No

Comments: I support this bill for the simple reason that we need to encourage, not discourage, consumers to help to reduce our dependency on fossil fuels. When I installed my home PV system two years ago, this charge for a study was non-existent. I was suprised lately to learn that costs are added on to the cost of being green and keeping CO2 out of our environment.

Lorn Douglas

RR2 4544
12-7045 Kekainehe St.
Pahoa, Hawaii 96778
(808) 965-8421
lornd@yahoo.com

Feb 3, 2013

To: Committees of the Hawaii Legislature Considering Sustainable Residential Solar Systems

Re: In Support of Bills SB 366

Aloha,

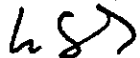
When Capt. Cook "discovered" the Sandwich Islands there were about as many people living on the Big Island as are now in the entire state. There were no barges bringing in food, building materials, appliances, cars, petroleum or anything else. Homes were built of natural materials found and growing naturally; food was harvested from the sea and grown sustainably. Even natural medicine was found in the sea and on the land.

I am a thirty year resident of Hawaii and retired businessman very active in my community. On my one acre I have a tree orchard with many varieties of fruit, several vegetable gardens, a solar system supporting two houses AND two electric automobiles. I have a negative carbon footprint and my little estate is an example of how we can live in a way more sustainable and responsible way.

Germany which obviously is way north of Hawaii now generates 50% of their power by solar obviously generates close to 100% of their power during the day to average 50%. After 20 years of off grid solar living I installed a 'net-metering' 5 Kilowatt system which is supplying a surplus of power for my family's needs. Additionally I live at the end of the 'grid' and as I understand it I help stabilize the grid being a smooth source at the end of the wire. My surplus is given to HELCO, lowering their costs of supply, thus lowering the cost to other consumers. This also will reduce our dependence upon imported petroleum.

I understand that raising the amount of solar into the grid may require more grid intelligence; certainly this will be a worthwhile investment. I appreciate your consideration of this matter.

Mahalo,



Lorn Douglas



Words: 124



support SB366

Hawaii is blessed with one of the best solar resources on the planet. Clean, safe, reliable, renewable, and community friendly solar power moves Hawaii in the right direction. Solar is the most promising and versatile choice for Hawaii's energy future.

My home is powered by 100% solar. Not only am I not lacking any of today's modern home conveniences. I am also not concerned about the constant increasing cost of electricity or the constant grid tied power outages. The technology is here and it works. Hawaii is held back by outdated corporate business models that continue to put the profit of those corporations ahead of the needs of the citizens of this state.

Please support SB366

Thank you

Sincerely Nicki Conti

Aloha Representative,

I support SB366 because solar generation is community friendly. I see solar power as the most promising choice for Hawaii's energy future. The combination of Hawai'i's premium solar resource and the lowering cost of solar power can bring a meaningful reduction in the cost of electrical power for our businesses and residents. More importantly, it will improve our environment impact by maintain Hawai'i's natural beauty and health. It is our work to lead Hawaii into the future with clean truly affordable power. SB366 leads us in the right direction. Please support SB366!

Sincerely,

Cindy Dupuis

SB366

Submitted on: 2/4/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Paul Kuykendall	Individual	Support	No

Comments:

SB366

Submitted on: 2/4/2013

Testimony for ENE on Feb 5, 2013 14:45PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
gregory todd smith	Individual	Support	No

Comments: I, Gregory Todd Smith, and my partner, Joyce Alberta Folnea, fully support this Bill SB366 as we firmly believe we need an open door policy to more and more alternate energy independent electric systems for home owners and businesses. We thank Senator Russel Ruderman for presenting this Bill SB366 and urge you to please pass this Bill SB366 all the way through the State legislative process. Thank you very much for all of your assistances to us here. Gregory Todd Smith and Joyce Alberta Folena

Trina Ishii

From: B Leonard [bjbleonard@yahoo.com]
Sent: Sunday, February 03, 2013 1:51 PM
To: Trina Ishii; Russell Ruderman
Subject: SB366

From: Dr. Barbara Leonard, PO Box 832, Pahoa, Hawaii 96778
Date: Sat, Feb 3, 2013 at 11:21 PM
Subject: SB366
To: Trina Ishii <t.ishii@capitol.hawaii.gov>
Cc: Russell Ruderman <russell@russellruderman.com>

Feb 5, 2013 2:45 PM

RE: SB366

Strong Support

Aloha Senator Gabbard and committee members.

I support clean, safe, reliable, disbursed, renewable, community friendly solar power. SB366 moves Hawaii in the right direction. Looking to distributed power generation and 21st century technology to propel Hawaii into energy independence.

I like this for many reasons but notably because disbursed solar generation is community friendly. Communities welcome this new age power generation. I see solar power as the the most promising choice for Hawaii's energy future.

Solar power is also the most versatile option going forward. It would allow for a gradual retraction and phasing out of the grid. With minimum conversion cost to convert installed systems to independent and stand alone production as storage systems catch up with the panel technology, or as the grid itself becomes more obsolete and prohibitively expensive.

The high cost associated with maintaining antiquated distribution systems is a drag on our economy. Maintaining and upgrading inefficient distribution systems keeps our rates high and takes money that should be allocated to other areas of our economy to maintain what really is an out dated business model.

Solar technology prices are crashing, the advances are coming so fast that last year we saw a 50% drop in the cost of panels, that followed a 27% drop the year before.

No other energy source can come close to that, we expect that trend to continue. Further Hawaii is blessed one of the best solar resources on the planet. With the combination of high rates and our premium solar resource added to the crashing cost of solar power we are perched a top a perfect storm for real meaningful reductions in the cost of electrical power for our businesses and residents, that at the same time will improve our environment tremendously boosting the economy even more.

Hawaii should be leading this solar economic revolution not playing catch up, held back by outdated corporate

Trina Ishii

From: Rosie Mroczynski [gaiawakening@gmail.com]
Sent: Sunday, February 03, 2013 9:52 PM
To: Trina Ishii
Cc: Russell Ruderman
Subject: please support SB366

RE: SB366

Strong Support

Aloha Senator Gabbard and committee members.

Puna Pono Alliance supports clean, safe, reliable, disbursed, renewable, community friendly solar power. SB366 moves Hawaii in the right direction. Looking to distributed power generation and 21st century technology to propel Hawaii into energy independence.

We like this for many reasons but notably because disbursed solar generation is community friendly. Communities welcome this new age power generation. We see solar power as the the most promising choice for Hawaii's energy future.

Solar power is also the most versatile option going forward. It would allow for a gradual retraction and phasing out of the grid. With minimum conversion cost to convert installed systems to independent and stand alone production as storage systems catch up with the panel technology, or as the grid itself becomes more obsolete and prohibitively expensive.

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Hawaii should be leading this solar economic revolution not playing catch up, held back by outdated corporate business models that simply can not compete or keep up. Energy policy in Hawaii should be about what is best for our people, not the energy monopoly that has led us to the highest rates in the country. It's not our job to continually bail out the corporate power monopoly, it's our job to lead Hawaii into the future with clean truly affordable power. SB366 leads us in the right direction.