HB 2417, HD2

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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REVISED 3/20/12

Statement of
RICHARD C. LIM
Director
Department of Business, Economic Development, and Tourism
before the
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
Tuesday, March 20, 2012
2:50 PM
State Capitol, Senate Conference Room 225
in consideration of
HB2417 HD 2 Proposed SD1
RELATING TO RENEWABLE ENERGY.

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

The Department of Business, Economic Development, and Tourism (DBEDT) opposes HB2417 Proposed SD1, which removes the Renewable Energy Technology System Tax Credit cap and changes the incentive structure for utility scale systems to a ten year production credit. DBEDT supports the HD2 version of this measure and requests that version be passed instead.

The proposed SD1 is likely to increase costs to the State and create conditions for a spike in short-term growth that may not be in the best long-term interests of the State. Assuming that solar capacity follows recent trends and doubles to 70 MW in 2012 for non-utility scale projects, and that an additional 67 MW of utility scale projects are completed within the next several years, the proposed SD1 would cost the State roughly $597 million. This scenario is illustrated below:

Non-utility scale:

- 2012: $147 million (70 MW x $6 million/MW cost x 35% tax credit)
- 2013: $126 million (70 MW x $6 million/MW cost x 30% tax credit)
- 2014: $105 million (70 MW x $6 million/MW cost x 25% tax credit)

- 2015: $84 million (70 MW x $6 million/MW cost x 20% tax credit)

Utility scale:

- 10 Year Credit: $135 million
  (67 MW x 20% capacity factor x 8,760 hours/year x $115 credit/MW-hour x 10 year credit)

DBEDT is also unclear as to when this proposed SD1 would take effect as section 1 of the bill makes the credit 35% without cap for tax years prior to 2013, but section 3 states these changes only apply to tax years beginning in 2013.

Thank you for your consideration of our comments in opposition. We respectfully request that the HD2 version of this bill be passed instead.

SEIA Solar Energy Industries Association®

SENATE COMMITTEEE ON ENERGY AND ENVIRONMENT

TESTIMONY IN SUPPORT OF

HB 2417, PROPOSED SD 1 RELATING TO RENEWABLE ENERGY

Testimony of
Solar Energy Industries Association
Tuesday, March 20, 2012, 2:50 p.m.
Conference Room 225

Chair Gabbard and members of the Committee:

The Solar Energy Industries Association, SEIA, supports HB 2417 as it is currently drafted in the form of the Proposed SD 1. SEIA is the national trade association of the United States solar industry. Through advocacy and education SEIA and its 1,100 member companies work to make solar energy a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy. Many SEIA members are Hawai'i companies, or have a strong presence in Hawai'i, including Solar City, Sunrun, SunPower, REC Solar, and others.

SEIA previously opposed HB 2417 because as originally drafted the measure would have limited the availability of the Hawai'i Renewable Energy Technologies Income Tax Credit (the "RETITC"). The RETITC has enabled the growth of the renewable energy sector in Hawai'i, contributed to Hawaii's clean energy goals, and created thousands of local jobs.

SEIA supports the proposed SD 1 version of HB 2417 because it believes these changes strengthen the RETITC structure and serve the long-term interests of the State, the public, and the industry by: (1) eliminating the artificial cap on the credit amount that was the source of perceived gaming; (2) reducing the credit gradually over time to protect the State's coffers while providing the industry and the public with certainty and visibility; and (3) by creating a separate tax credit structure for utility scale production which will spread incentives for large-scale projects out over a longer period of time. In short, these changes will address the legislature's concerns with the current credit structure while allowing the solar energy industry to continue to develop, strengthen Hawaii's economy, and help Hawai'i meet its clean energy goals.

Thank you for the opportunity to testify on this matter.

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L E G I S L A T I V E

TAXBILLSERVICE

126 Queen Street, Suite 304 TAX FOUNDATION OF HAWAII Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: INCOME, Renewable energy technology tax credit

BILL NUMBER: HB 2417, Proposed SD-1

INTRODUCED BY: Senate Committee on Energy and Environment

BRIEF SUMMARY: Amends HRS section 235-12.5(b) to provide that the tax credit for each solar electricity generating system that is not a utility scale solar electricity generating system placed in service: (1) prior to the 2013 tax year shall be 35% of the actual cost; (2) during the 2013 tax year shall be 30% of the actual cost; (3) during the 2014 tax year shall be 25% of the actual cost; and (4) during or after the 2015 tax year shall be 20% of the actual cost.

For each utility scale solar electricity generating system installed after the 2012 tax year, the tax credit shall be 11.5 cents per kilowatt hour generated during the first one hundred twenty months of the system's operation.

Defines "utility scale solar electricity generating system" as any solar electricity generating system that is interconnected to a utility grid at sub-transmission or transmission voltage. Defines "solar electricity generating system" as any system that uses the sun's energy to produce electricity directly with photovoltaics or indirectly with concentrating solar power technologies.

Requires taxpayers claiming the credit for utility scale solar electricity generating systems in a tax year to document each system's production with a notarized letter from an electrical engineer licensed in Hawaii attesting to the number of kilowatt hours produced by the system in that tax year.

Also provides that the tax credit for solar electricity generating systems shall be fully refundable without the necessity of reducing the eligible credit amount for systems installed during or after the 2016 tax year.

EFFECTIVE DATE: Tax years beginning after December 31, 2012

STAFF COMMENTS: This measure establishes separate renewable energy tax credits for a utility scale solar electricity generating system and a non utility scale solar electricity generating system. A utility scale solar electricity generating system is a system that is connected to a utility grid at sub-transmission or transmission voltage while a non utility scale solar electricity generating system would not be connected to a utility grid. As this measure proposes, a utility scale solar electricity generating system would be eligible for an income tax credit for ten years at 11.5 cents per kilowatt hour while the non utility scale solar electricity generating systems would be eligible for a tax credit of a percentage of the actual cost of the system.

This measure acknowledges the high cost of renewable energy technologies and further encourages the use or purchase of such renewable energy technologies through the use of tax credits for such systems.

While some may consider an incentive necessary to encourage the use of energy devices, it should be noted that the high cost of these energy systems limits the benefits to those who have the initial capital to make the purchase. If it is the intent of the legislature to encourage a greater use of renewable energy systems by increasing and expanding the existing system of energy tax credits, as an alternative, consideration should be given to a program of low-interest loans. However, if the taxpayer avails himself of the loan program, the renewable energy credit should not be granted for projects utilizing the loan program as the project would be granted a double subsidy by the taxpayers of the state. Such low-interest loans, that can be repaid with energy savings, would have a much more broad-based application than a credit which amounts to nothing more than a "free monetary handout" or subsidy by state government. A program of low or no-interest loans would do much more to increase the acquisition of these devices.

Instead of providing tax incentives for the purchase of existing technology, lawmakers may want to take advantage of Hawaii's natural environment which lends itself to all sorts of possibilities to explore and develop more efficient means of harnessing the natural resources that pervade the Islands, from wind to sun to geothermal to hydrogen from Hawaii's vast resources, all of which could be further developed with the assistance and cooperation of government in Hawaii.

Finally, the current statute providing these tax incentives for renewable energy technologies reflects the lack of due diligence and good hard research on the part of lawmakers. Apparently the caps imposed on the tax incentive for the solar electric generating systems are far from being realistic. For example, the $5,000 cap for residential installations translates into about $15,000 of "actual cost." Anything greater than that amount would exceed the cap of the 35% tax credit. On the commercial side, the half million-dollar cap may be insufficient for a commercial building to generate a net-zero status that would avoid a stand-by charge by the local electric company. Those stand-by charges have been reported to sometimes exceed the bills had the building owner not installed such solar electric generating systems. Thus, the law, as currently written, does not take into account these resulting contradictions.

Digested 3/19/12

Hawaii Solar Energy Association
Serving Hawaii Since 1977

March 15th, 2012

Testimony Before the Senate Committee on Energy and Environment

In Regards to HB2417 SD1
On Tuesday, March 20th of the year 2012

HSEA Official Position: Support with recommendations

Chair Gabbard, Vice Chair Lee, Members of the Committee,

My name is Gabriel Chong and I am the President of the Hawaii Solar Energy Association (HSEA). The HSEA was founded in 1977 to further the development of Renewable Energy Systems of all sources throughout the State of Hawaii, including Solar Water Heating (SWH), Photovoltaic (PV) and Concentrated Solar Power (CSP) technologies. Since 1977, the HSEA is the longest running Solar Industry association and has grown to be the largest voice for the Solar Industry of Hawaii, representing more than 66 businesses and nearly 1,000 member employees.

The HSEA would like to testify in Support of the proposed HB2417 SD1 with recommendations for minor alterations of this proposal.

The HSEA supports SD1 as it addresses the current key issue by removing the cap for Photovoltaic (PV) systems to prevent contractors from attempting to comply with "multiple systems" credit caps. SD1 also proposes a ramp-down of the state-tax credit over the course of the next four years. By removing a cap and the terminology "system", SD1 has effectively discouraged contractors from building multiple system designs and using more effective designs that will result in a lower system cost for homeowners as well as a reduced fiscal impact to the state.

The HSEA does not support the current draft of utility scale project credits. The proposed credit, at $0.115/kWh for the first 10 years, may result in a tax credit equivalent of 45+% for the total system size. Ideally, the HSEA would support a scenario in which all cases remain consistent with one another, such as a 35% tax credit for residential, commercial, and utility scale projects. This would bring simplicity and consistency across all project sizes for the Solar Industry of Hawaii. Alternatively, the HSEA would support a "cap per D/C watt" installed as proposed in HD2 with no cap on total cost.

The HSEA does not support the current draft of views on Solar Water Heating (SWH) systems. While SD1 does provide incentives for the photovoltaic portion of the solar industry of Hawaii, it does not provide equivalent support for other portions of the

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industry, especially dealing with SWH systems. The HSEA recommends that the state provide SWH systems with the same incentives as PV systems to ensure that homeowners receive the proper system development using proven technology for heating water as well as generating electricity for a home. All solar technologies deserve the same consistent incentives.

Lastly, the HSEA recommends that SD1 include stricter use of the SWH materials in new-construction homes. There are many loopholes that are allowing non-high-efficiency products (such as instant-hot water heating technologies) to be used in substitute to a SWH system, which is a renewable technology with a long-term lifespan.

In summary, the HSEA believes that the proposed HB2417 SD1, with the recommended alterations, provides a win-win scenario by supporting the Solar Industry of Hawaii while also supporting the economy of Hawaii.

Thank you for the opportunity to submit our views.

Gabriel Chong
President

HAWAII PV COALITION

3/20/2012	**Senate Committee on Energy and Environment**	**ENE**
2:50 PM		**HB2417 SD1**

TESTIMONY IN STRONG SUPPORT

Aloha Chair Gabbard and Vice-Chair English and Members of the Committee:

The Hawaii PV Coalition (HIPVC) strongly supports the proposed SD1 of this measure because it represents a common sense way forward that leaves the State of Hawaii, consumers of solar energy, and the solar industry better off than the status quo. It does this by addressing challenges of the current system in a way that does not compromise construction activity/employment, resolves issues with the administrative efficiency of the credit, and lowers exposure of the General Fund to the credit. And, crucially, it does so in a predictable way that lowers the risks involved in investing in solar projects and hence the risk premium investors currently demand for investing in PV projects in Hawaii. Meanwhile, it gives homeowners, business owners, and investors clarity about the level of the credit they receive for particular systems.

Despite the rhetoric of 'multiple systems' and 'abuse' of the section 235-12.5 renewable credit, the Department of Taxation has a well-articulated system for determining the total value of tax incentives available for a specific project. This system has been in place since 2007 with the publishing of Tax Information Release 2007-02, and has been supported by various other TIR's and Letter Rulings since that time. As a result, for the entire period of viability of the PV industry, there has never been ambiguity about the possibility of residential, commercial, and utility scale consumers/developers of solar energy projects - that have followed the DoTax guidance - having the possibility of more than one PV system on a particular PV project.

That said, there is clearly room for improvement with the existing credit and the solar industry <u>welcomes</u> such improvement. The two primary challenges are the administrative efficiency of the measure and the possible exposure of the General Fund to the credit. SD1 of this measure solves both of these problems. It does so in several ways:

1. It shifts much of the near term burden of the solar credit out over ten years instead of one by transforming the credit for utility scale systems into a production credit rather than an income tax credit.
2. It eliminates the issue of DoTax determining the number of systems on a given project by eliminating the cap, but then lowers the level of the credit.

With these two changes the State can accomplish its goals while maintaining the viability of the solar industry, which is doing so much to lower fossil fuel consumption and maintain construction employment statewide.

Thank you for the opportunity to testify on this measure.

Mark Duda
Government Affairs Committee Chair, Hawaii PV Coalition

About the Hawaii PV Coalition

The Hawaii PV Coalition was formed in 2005 to support the greater use and more rapid diffusion of solar electric applications across the state. Working with business owners, homeowners and local and national stakeholders in the PV industry, the

HAWAII PV COALITION

Coalition has been active during the state legislative sessions supporting pro-PV and renewable energy bills and helping inform elected representatives about the benefits of Hawaii-based solar electric applications.

The Coalition has also taken a very active role in policy discussions to promote best practices for distributed generation and interconnection rules. The Hawaii PV Coalition is currently intervening in two open PUC dockets, the Reliability Standards Working Group (2011-0206) and Rule 14H (2010-0015).

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SUNPOWER

Room # 225 2:50 PM March 20, 2012

Senate Committee on Energy and Environment

HB 2417, HD, Proposed SD1 RELATING TO RENEWABLE ENERGY

Chair Gabbard, Vice-Chair English and Committee Members:

Introduction: My name is Riley Saito Senior Manager, Hawaii Projects, for SunPower Systems Corporation. SunPower is a dedicated supporter and active participant in Hawaii's renewable energy initiatives and has been an active in policy shaping for over 14 years.

- Charter member of the Hawaii Energy Policy Forum,
- Steering Committee -Hawaii Clean Energy Initiative, Hawaii
- Energy Generation Working Group -Hawaii Clean Energy Initiative, Hawaii

SunPower is focused to work with the energy partners in Hawai'i to reduce importation of fossil fuels, improve the quality of life for Hawai'i future generations.

Mahalo in advance, for accepting comments in Support with requested changes in HB 2417, HD1 (Proposed SDI).

The Market Results: Private, government, and utility entities are seeking a long term solution to stabilize operating costs, reduce fossil fuel dependency, and attract out of State investors to provide the capital. The partnership between, the industry, asset/land owners, (including DNLR/DHHL/DOTA/DOE/UH Systems), and financial investors, (public/private) appreciate that the State of Hawaii is a partner to make this possible.

Ask of the Committee:

Utility Scale Projects Reference: Section 1 (2)
Change effective date to tax year after 2013.)

The language of the tax credit statute requires that a SYSTEM BE PUT INTO SERVICE as a pre-condition to be eligible for the tax credit. This system must be constructed, installed tested and operating. (State has experience the full economic stimulus benefits prior to any obligation of the utility scale production tax credit).

The complexity of transmission level interconnection takes YEARS to be constructed and installed. The existing statute is the framework in which current developers and related agreements have been pursued and under current negotiations over the past few years. This involves multiple factors including the utilities; technical studies regarding reliability performance, (minimum of 10 to 18 months); PUC/CA approval; and the slew of land use/permitting hurdles/agreements. The Utility Scale projects are for 20+ years, resulting is a high level of evaluation for financial investors in which all these factors must be aligned to enable financing. To require that Utility Scale systems be operational by the end of 2012 is not possible, (given Hawaii's "administrative/legal" requirements), work the projects in motion that has taken the years of due diligence performed by developers, (utility scale projects) assuming the current framework.

Mahalo,

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SUNPOWER

Riley Saito
Senior Manager, Hawaii Projects
SunPower

ProVision Solar, Inc.
Electrical Contractor C-26351

March 17, 2012

To: Members of Senate ENE Committee

From: Marco Mangelsdorf, President, ProVision Solar

RE: HB 2417 HD2

I have been active in the renewable energy field since 1978, been working in the solar electric field full-time in Hawai'i since 2000 and founded the Hawai'i PV Coalition in 2005.

I strongly support passage of HB 2417 HD2.

The intent of the state's renewable energy tax credit was NEVER to promote individual homeowners' ability to double, triple and even sextuple dip as far as getting so many separate $5,000 tax credits per residence. The advent of new inverter technologies and cheaper PV system costs have effectively allowed these multiple tax credits to proliferate over the past several years with the Department of Taxation drawn into the near impossible task of trying to come up with rulings and essentially play the Solar Police, trying to figure out which specific and unique site conditions allow for one versus two versus however many separate tax credits are allowable.

Enough already. We've seen a doubling of installed PV in Hawai'i from 2009 to 2010 and at least another doubling from 2010 to 2011. The PV industry has achieved an economy of scale and price reductions that has allowed PV to become more mainstream and affordable than ever before.

Tax credits were never designed to be a handout or lift up in perpetuity and the recommended changes to the current tax credit law in HB2417 HD2 are fair and reasonable.

Hysterical claims of likely catastrophe notwithstanding, the passage of this bill will not cause the sky to fall on the state's PV industry. It will restore a balance and fairness to the renewable energy tax credit law.

Finally, I would respectfully suggest that this law go into effect as soon as July 1, 2012 and that a sunset date of no later than December 31, 2016 be added.

Thank you.

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Rolf Christ
R & R Solar Supply
Honolulu

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

IN REGARD TO
HB2417 proposed SD1
ON
TUESDAY, MARCH 20, 2012

Testimony in support with recommendations

Chair GABBARD, Vice-Chair ENGLISH, DEAR COMMITTEE MEMBERS, my name is Rolf Christ and I am the President and CEO of R&R Solar Supply, a local solar collector manufacturer and wholesaler. I am also active as treasurer on the board of the Hawaii Solar Energy Association .

R&R supports HB2417's proposed SD1 with recommendations for minor changes.

The proposed draft addresses most issues with the current law by removing the cap for PV systems to prevent expensive system designs to take advantage of "per system" caps and ramping down the credits to limit the fiscal impact of tax credits.
On the other hand, to our surprise, this draft increases the fiscal impact to the state by granting utility scale projects a production tax credit that equals a 40% to 50% tax credit on the estimated system cost for those projects.

If it is true that there is a positive return to the State for the credits paid out it is also true, that the return diminishes when incentives are too high.

A carefully measured incentive also provides for a stable industry with a solid long term outlook. Under-incentivising might kill a striving industry and over-incentivising might create a mad rush followed by a vacuum. None of the 2 scenarios are desired.

Also, a production tax credit favors areas with good sun resources only, because those projects are investor driven.

For those utility scale projects we prefer a cap per D/C watt installed as proposed in HD2 or no cap with the same percentage credit ramp down as in the residential installations.

Dealing with the popular PV market, we also should not loose sight of the solar hot water industry. Solar hot water systems utilize many commodities such as copper, glass and aluminum. Unlike PV material costs, we have been on the decline, costs for those commodities used in solar hot water technologies have steadily increased over time. The cap for those systems has been adjusted in the past from $1750 per system to $2250 per system. Due to rising average system cost in the utility rebate program, an adjustment or removal of that cap is also warranted at this time. For multi-family projects and especially for those that are rentals a $350 cap per unit covers maybe 10% of the installed cost, rather than the intended 35%. Again raising that cap to $1000 or removing it would stimulate a market that has shown hardly any activity in the past. Just look at all those Makiki walk-ups with electric water heaters and no solar in sight. Not being able to utilize the federal tax credits for residential rental properties in most cases puts additional strain on those projects.

Thank you for the opportunity to present these comments.

Rolf Christ
President

INTER-ISLAND SOLAR SUPPLY

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March 20, 2012

Testimony Before the Senate Committee on Energy & Environment

On HB2417 Proposed SD1 Relating to Renewable Energy

Chair Gabbard, Vice Chair English, Members of the Committee,

My name is Rick Reed and I am president of Inter-Island Solar Supply which was founded in 1975 and operates three branches on the islands of Oahu, Maui, and the Big Island. Inter-Island Solar Supply is a charter member of the Hawaii Solar Energy Association.

I am here today to testify in support of HB2417 Proposed SD1 and would like to offer suggestions that would make this draft more equitable between residential and non-residential systems.

Subsection 1(a)(2), page 2, lines 10-13, appears to provide for a credit of 11.5 cents/kWh for the first ten years of utility scale solar electric generating system production. This equates to over 40% and up to 50% tax credit depending on the installed cost. This may be too generous, especially since this draft proposes a declining credit for non-utility scale systems, including residential systems.

Subsection 1(b)(1), page 3, lines 14-19, leaves the caps for solar water heating systems unchanged. These caps were adopted in 1990 and have not been updated since. Unlike PV systems, costs for these systems have risen over time because of increases in materials and labor costs. Caps may no longer be necessary. The Hawaii Energy Program has mechanisms in place that assure the State receives value for the tax credits invested in solar water heating systems. If caps continue to remain in place, increasing them to the levels delineated in HD2 would be acceptable.

Subsection 1(b)(2)(A) deleted, page 4, lines 3-9, eliminates the provision to reduce the tax credit amount for substitute renewable energy technologies installed in new single family dwellings in lieu of "mandated" solar water heating systems. Elimination of this provision subverts the solar mandate. This situation can be easily remedied by including this provision in Subsection 1(a)(3), page 2 of proposed SD1.

Subsection 3, page 7, lines 12-16, makes tax credits for solar electric generating systems fully refundable after 2016. This provision creates an unfavorable bias against solar water heating and wind energy systems. Refundable credit provisions should be consistent across all eligible renewable energy technologies.

Thank you for the opportunity to submit testimony on HB2417 Proposed SD1.

FORESTCITY
HAWAII

The Senate Committee on Energy & Environment

March 20, 2012; 2:50 p.m.
Conference Room 225

HB 2417, HD 2, Proposed SD 1
Testimony in Support

Chair Gabbard, Vice Chair English and Members of the Committee, my name is Jon Wallenstrom and I am the President of Forest City Hawaii. Forest City Hawaii is principally engaged in the ownership, development, management and acquisition of commercial and residential real estate and land in Hawaii. It is currently involved in a partnership with the Hawaii Housing Finance and Development Corporation (HHFDC) to develop Kamakana Villages, a mixed-use community of 2,206 homes on the Big Island, of which more than 50% will affordably priced. It recently completed construction of the largest utility-scale solar photovoltaic farm on Oahu to date. A sister company, Hawaii Military Communities, built and manages 6,500 Navy and Marine family homes across 36 neighborhoods on Oahu and Kauai. Parent company, Forest City Enterprises, is an $11.5 billion NYSE-listed national real estate development company.

Forest City supports the Proposed SD 1 of HB 2417, HD 2. The Proposed SD 1 of HB 2417, HD 2 gradually reduces the tax credits that may be claimed for solar electricity generating systems over the period of several years. In doing so, property owners will still be allowed to claim a tax credit per installed system, and the negative impact on the solar industry construction industry with the reduction in the credits are minimized. The solar industry which in 2010 contributed to 15% of statewide construction has been creating employment opportunities for our *ohana* during a period of economic downturn. Moreover, implementation of renewable energy alternatives, such as harnessing solar power, has been in keeping with the HCEI initiative to ensure long term energy and economic independence, reducing our dependence on fossil fuels importation.

Thank you for the opportunity to testify on this measure.

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AES Solar ENERGY

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TESTIMONY OF JODY ALLIONE ON BEHALF OF AES SOLAR POWER LLC BEFORE THE HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

HB 2417, HD2 Proposed SD1 RELATING TO RENEWABLES

March 20, 2012

Chair Gabbard, Vice-Chair English and members of the Committee I am Jody Allione, testifying on behalf of AES Solar Power LLC (AES Solar). AES Solar is a utility scale solar development corporation that is developing solar projects on a worldwide basis and has invested substantial time and effort in developing utility scale PV solar projects in Hawaii. We have three projects that are well advanced in development in Hawaii that would be substantially impacted by new tax legislation affecting state solar credits.

The purpose of HB 2417 SD1 is to establish a simplified tiered tax credit without a cap for non-utility scale and utility scale solar electricity generating systems. AES Solar supports the intent of this measure as it supports the overall state mandate to increase renewable energy production and it has invested substantial capital to bring its projects to fruition. We offer the following comments.

1. Implementation Timing: The current projects that may start construction this year and achieve commercial operation during 2013 are based on the existing tax structure. To change the tax structure that these projects are based on may create significant problems with the tax equity participants that have agreed to provide financing based on certain expectations and an existing comfort letter form the Dept. of Taxation. Since such projects could be jeopardized, these shovel ready projects should be grandfathered under the existing rules. We propose that all projects that have PPAs that are been filed with the PUC by the end of 2012 would qualify for the existing tax structure. This could be further qualified with a clause that allows the date of Commercial Operation to be within 2-3 years of the PUC filing date.

2. Refundable Tax Credits: Currently the tax credit structure allows a cash grant that is refunded to those entities that do not have a state tax appetite. This grant is discounted from the tax credit by 30% and is paid in the first year of operation. This grant has attracted companies that otherwise would not be interested in investing in projects in the lower size range that Hawaii projects fall into. HECO's FIT pricing is based on two tiers and the one that has been the most successful is based on the tax grant in year one. Under this proposed ruling, the tax grant would be paid on an annual basis over the first ten years of operation. This may not be appealing to equity investors and a solution should to be structured that is fair, easy to implement, and attractive to investors.

The complexity of structuring a new tax credit ruling needs to be reviewed and carefully crafted to provide a simple solution that does not overburden the Dept. of Taxation with multiple complex rulings and provides incentives that would maintain the momentum of the solar industry. I recommend the formation of a committee to review and propose new regulation during the next legislative session.

Thank you for the opportunity to testify.

Jody Allione
Project Development Director, Hawaii
AES Solar Power LLC

sunetric

Senate Committee on Energy and Environment
Testimony in opposition to House Bill 2417 HD 2

Testimony of Alex Tiller, Sunetric CEO
Tuesday, March 20th, 2:50pm

Chair Gabbard, Vice Chair English, and members of the committee:

Sunetric is a Hawaii based company that designs and installs solar systems for residential and commercial clients. Our company has 140 employees located on Oahu, Maui and Hawaii Island, although we do solar work on all of Hawaii's islands. We are grateful to the Legislature for the support that we've received in the past and look forward to a continued productive relationship in which our industry works to achieve the state's energy and economic security goals, while also providing meaningful work for ourselves and our employees.

Sunetric **opposes** House Bill 2417 HD 2 because the proposed changes to the Renewable Energy Technology Income Tax Credit (RETITC) would have significant negative impacts.

First, the current tax credits for renewable energy devices, which are great policy tools to encourage and incentivize investment in clean energy, are now actually working and should not be restricted. A report released last week by GTM Research and the Solar Energy Industries Association cites exponential growth in the solar industry nationwide and cites that in 2010, Hawaii installed a total of 16 megawatts (MW) worth of photovoltaic (PV) systems and was ranked 15th in the nation for the total number of PV installations. Last year, Hawaii installed a total of 40MW worth of PV systems, a twofold increase since 2010, and was ranked 11th in the nation for the number of PV installations. This exponential growth can be directly correlated to the state incentive which did not come into effect until June 2009. Because of the increasing investment in PV systems witnessed in Hawaii over the past several years, Hawaii is projected to be fourth in the nation for the total number of residential PV system installations and sixth in the nation for non-residential PV system installations this year. This clearly shows that the RETITC is indeed having a positive impact on moving the state and its residents toward using significantly more renewable energy.

Second, the state will be unable to meet The Hawaii Clean Energy Initiative mandate that Hawaii must use 40% clean energy by 2030 if the RETITC is restricted. It is contrary to the state's desire for increased energy self-sufficiency and security. Even with the current path we are on, we are not on pace to achieve our goal, yet the legislature seems concerned that this program is too successful and plans to throttle back a piece of wise policy that is just starting to see success. With Hawaii currently importing 90% of its oil for its energy needs, Hawaii is more dependent than any other state in the nation for oil imports and restricting the RETITC would significantly stunt the growth and progress that has been made thus far to help achieve this goal.

Third, the bill in its current form would have a devastating impact on the state's solar industry, as there are many large scale solar projects in the middle of the development process, and if not handled carefully, will not come to fruition. Feed-in-Tariff (FiT) and large utility deals are structured transactions that use sophisticated financial assumptions based on current/known tax incentive data. These large scale projects are incredibly important and necessary in order to achieve the Hawaii's renewable energy goals. Most big projects have been in development for several years now and all of them use financing assumptions based on previous direction provided by Tax Information Releases (TIR's) from HI DoTax. Penalizing these projects and their participants will only cost the state in the long run by delaying this important work, or worse yet, chasing away the first few investors and banks that were willing to invest in and commit to Hawaii's important goal. There are very few entities globally that understand and participate in these markets. The only ones that would be left standing that might be able to fund these types of deals would by no means be the early adopters that we seek for support. Instead it would be the vultures waiting to pick up the scraps with an incredible eye toward not having change come in the midst of their project. In other words, liquidity would be limited, and projects would be plagued from the beginning based on the assumption that HI DoTax cannot be trusted.

There would be few qualified trustworthy parties left that would be willing to help us reach our goal, instead our noble cause would be left to the equivalent of loan sharks. Renewable energy and tax incentive funding partners and investors attract a certain type of sophisticated investor/institution that will only continue to invest in the state if there is a solid, predictable program in place. Both residential and commercial projects will be negatively affected by this bill, and numerous jobs placed in jeopardy, because the changes that are being proposed are too abrupt. The RETITC also creates substantial tax income to the state in the form of General Excise Tax, personal income tax, and GET on supplies and equipment. The last (and only) numbers on record as reported by the Energy Efficiency Policy Task Force (EEPTF) in 2002 concluded that for every ECITC (or state of HI) dollar spent to support a solar purchase, $1.82 of tax revenue is generated for the state (the EEPTF was created pursuant to legislative action in 1998 and provided a report of its activities and recommendations to the Legislature in 2002). Based on this information, there should be no cap as this is one of the few opportunities the state has at its disposal to generate tax revenue, create jobs and become more energy efficient.

Fourth, if the Legislature is compelled to reduce and/or amend the RETITC, we strongly recommend that it be done in a systematic manner so that local solar companies like Sunetric can adequately and properly plan for such an impact heading into the future. Germany is an excellent example of future planning, while Spain, Italy, Colorado and New Jersey are text book examples of markets that have been devastated by the abrupt repeal of incentives. Those markets lacked adequate warning and planning time necessary or the businesses in the market respond. The solar industry in those markets will likely never recover as the investor and banking community has lost faith, and the experienced vendors were abruptly driven to bankruptcy. Put simply, now there is no one willing to go be the test dummy, vendor, investor or lender. The Senate Committee on Energy and Environment could consider resurrecting the EEPTF (or a similar task force) to review existing statute regarding the RETITC, tax collection activities of the state Department of Taxation, and to develop a set of recommendations for a systematic reduction of the RETITC over time.

Thank you for the opportunity to submit testimony on this measure.

Sincerely,

Alexander Tiller, CEO
Sunetric

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Support
Testifier will be present: No
Submitted by: peter knerr
Organization: Individual
E-mail: knerrm001@hawaii.rr.com
Submitted on: 3/17/2012

Comments:

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Oppose
Testifier will be present: No
Submitted by: Carolyn L Knoll
Organization: Individual
E-mail: clk5356@gmail.com
Submitted on: 3/19/2012

Comments:
Don't "fix" what is not broken!! Bad bill!! Keep the tax incentives the same.

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Oppose
Testifier will be present: No
Submitted by: Byron W. Baker
Organization: Individual
E-mail: patbak1@hawaiiantel.net
Submitted on: 3/19/2012

Comments:
Reducing incentives for alternative energy continues to be a bad idea, not only because it will negatively impact both jobs and investment, but also because it will restrain our efforts to combat global warming/climate change. This issue is more urgent than ever, witness extreme weather, both here and on the mainland. We should be working aggressively to reduce greenhouse gases in the atmosphere.

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Support
Testifier will be present: Yes
Submitted by: Albert Perez
Organization: Individual
E-mail: makaleha63@yahoo.com
Submitted on: 3/18/2012

Comments:
Dear Mr. Chairman,

I would like to express my support, with some reservations, for the amendments proposed in Senate Draft 1 of HB2417.

1. Removal of the cap in Section 232-12.5(a)(1) will improve the quality of photovoltaic systems delivered to homeowners. Currently, there is a $5,000 cap per "system". According to guidance provided by the Department of Taxation in Tax Information Release No. 2010-03, dated May 21, 2010, "qualified renewable energy technology systems . . . must have an independent connection into a project site's electrical system . . . ". The result is that some solar electric companies design photovoltaic projects with equipment that is obsolete and/or inappropriate, with the express purpose of creating as many tax credits as possible. This practice lowers the net cost to the homeowner, and thus gives these companies an edge in the highly competitive solar market. If the cap is removed as proposed in this draft of the bill, this practice will cease, since newer equipment is more efficient, safer, and more reliable. Solar companies will then need to succeed on the strength and efficiency of their designs.

2. However, I believe that if we are to reach our goal of energy independence, we need to be raising the percentage tax credit, not lowering it. At the very least, the percentage tax credit should remain at 35 percent.

3. Finally, the current system does not help people with moderate incomes who do not have sufficient tax liability to use the tax credits. The legislature should consider adopting a sliding scale of tax credits, with higher percentages going to people with lower incomes. For example, people earning less than the median income could receive a tax credit equal to 50 percent of the system cost, while those earning over triple the median income could receive a tax credit equal to 20 percent of the system cost. This would help people with limited incomes, who need the most help, to take control of their energy bills. Once their electricity costs have been lowered, lower income people are more likely to spend the difference on other necessities; this will provide a direct and immediate stimulus to our state's economy, while still moving us forward on the path to energy independence.

Thank you for the opportunity to testify on this important matter.

Sincerely,

Albert Perez

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Oppose
Testifier will be present: No
Submitted by: janice palma-glenie
Organization: Individual
E-mail: palmtree7@earthlink.net
Submitted on: 3/19/2012

Comments:
Aloha,

This bill limits tax credits for use of clean energy and would inhibit the switch to environmentally sustainable, clean technology by discouraging its potential users.

Mahalo.

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Oppose
Testifier will be present: No
Submitted by: Brilana Silva
Organization: Individual
E-mail: brilana@gmail.com
Submitted on: 3/19/2012

Comments:

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Oppose
Testifier will be present: No
Submitted by: Michal Stover
Organization: Individual
E-mail: mfsleh@ulukanu.com
Submitted on: 3/19/2012

Comments:
HB 2417, as it currently stands, will limit the state tax credit for photovoltaic systems (PV) to $7,000 per home, which could pose a limiting factor to some homeowners ready to make the transition. This Bill also changes the tax incentives for commercial PV systems, and offers a lowered credit amount for the portion of the system over 300kW. Many projects have been going through design and due diligence for many months and reducing the tax credits, especially for larger systems, could stop those projects from being completed. Outside investors and renewable energy companies enter the Hawaii market after consideration of the current tax credits. Sudden changes to renewable energy tax credits can send a message that the market is less stable and they may seek less risky opportunities.

March 19, 2012

Senate Committee on Energy and Environment
Public Hearing: March 20, 2012 at 2:00 p.m., room 225
Regarding: HB 2417

Dear Chair Gabbard, Vice Chair English, and members of the Committee,

As an advocate of energy sustainability and environmental protection, I strongly oppose HB 2417 because it would both reduce state revenues and slow Hawaii's goal of energy sustainability.

HB Would Reduce State Revenues

Although the intent of HB 2417 is to save tax dollars by reducing the number of systems eligible for the Renewable Energy Technology Tax Credit, the actual effect of the bill will be to reduce tax revenues. The solar energy industry brings in revenue to the State in the form of a General Excise Tax, State income tax, sales tax on materials, duty tax on all imported materials including solar panels, and employee tax contributions. These considerable revenues are offset in part by the tax credit, but does the State know what the overall impact on State revenue will be? It makes no sense to reduce a tax credit, only to reduce tax revenues even more because of loss of GET, State income tax, sales tax, duty tax, and employee tax contributions. Abrupt tax adjustments should not be made when the impact on State revenues is not known.

HB 2417 Will Restrict People's Access to Renewable Energy

The drastic reduction mandated by HB 2417 will put renewable energy systems out of reach for most people. Right now, the State tax credit allows for a credit of 35% per system with a cap depending upon the type of system. HB 2417 calls for a cap of $7,000 no matter what the size or capacity of the system or the number of systems per TMK. This limit of one credit per TMK could increase the cost of an alternative energy system by thousands of dollars and greatly restrict access to only a small number of people. And not only would HB 2417 restrict access to alternative energy, it would prevent low and moderate income home owners from participating in Hawaii's goal of using indigenous energy. Should HB 2417 pass, alternative energy will once again become exclusive technology only to be used by the wealthy and the utility.

HB 2417 Will Cut Community Investment and Impede Progress Towards Clean Energy Goals

When a homeowner invests in an alternative energy system, that person is investing in the community and Hawaii's goal of energy sustainability. For instance, for an average PV system for a 4-bedroom home, the homeowner is contributing approximately $20,000 out of his or her own pocket after all tax credits. The energy then harvested by the system is energy the utility does not have to provide, and dollars that do not go to oil producing Countries. Where would we be if every household in Hawaii contributed $20,000 towards energy independence?

Proposed Amendments

In order to phase out the tax credit while still supporting the State's economy and clean energy goals, I propose the following amendments:

- Reduce the tax credit by 10% each year through 2016 to allow the industry and consumers to adjust to increased costs.
- Allow credit for each alternative energy system, so that the tax credit is not limited to one per TMK.

Summary

Alternative energy projects targeted by HB 2417 have already helped Hawaii take a crucial step towards energy independence for Hawaii by providing the long-term means to wean Hawaii off expensive and unreliable foreign oil. In these tough economic times, it is understandable that measures would be taken to limit tax credits. However, such limits should not be implemented at the sake of Hawaii's overall energy stability and economy.

Thank you for the opportunity to testify.

Leslie Cole-Brooks
Attorney at Law

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Support
Testifier will be present: No
Submitted by: Doug Levin CPA
Organization: Individual
E-mail: doug@levinhu.com
Submitted on: 3/19/2012

Comments:
Support, thank you!

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Oppose
Testifier will be present: No
Submitted by: James McCay
Organization: Individual
E-mail: jmccay@hotmail.com
Submitted on: 3/19/2012

Comments:
A step backwards if this is passed for a state that MUST move forward rapidly with clean energy!

Regards,
James McCay
2957 Kalakaua Avenue #216, Honolulu, HI 96815-4650

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Oppose
Testifier will be present: No
Submitted by: Steven Mazur
Organization: Individual
E-mail: steven.mazur@gmail.com
Submitted on: 3/19/2012

Comments:
Aloha Committee Members. As a solar developer, I am hearing first hand from clients that are concerned about a reduction in tax credits. Many homeowners and investors from Hawaii and abroad will more likely consider other investments if this bill passes in its current form. While there is room for improvement in the current law such as adding a mechanism to slowly change the credits as milestones are met or the requirement of energy audits to qualify for incentives, this Bill has an abrupt and significant reduction that encourages homeowners to only purchase small systems that do not meet the needs of larger family residences. The commercial sector will lose some investors/financiers, and projects that have been going through due diligence for many months may be cancelled. The momentum for renewable energy adoption is strong as needed for Hawaii Clean Energy Initiative's aggressive goals, and I am concerned that this bill as it stands will decrease that momentum. A task force should discuss improvements to the programs and address them during next year's legislative session. For now, let's keep the state's tax revenue strong that is resulting from a strong clean energy job market and strong sales of clean energy systems.

Thank you,

Steven Mazur
808-469-5022

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position:
Testifier will be present: No
Submitted by: anthony aalto
Organization: Individual
E-mail: abaalto@gmail.com
Submitted on: 3/20/2012

Comments:
Aloha Chair Gabbard and Members of the Committee,

My name is Anthony Aalto. I'm a resident of Honolulu and I thank you for this opportunity to testify in strong opposition to this bill.

Hawaii desperately needs to revitalize its economy and create new jobs. It needs to do so by building new industries and by making our way of life more sustainable. The PV business which would help accomplish all three goals, is only just starting to establish itself in our state, encouraged by a tax regime that has not long been in place.

So why monkey with the tax credits? This bill would introduce an element of uncertainty, it would deter potential residential hookups, it would undermine commercial projects that are in the pipeline that have not yet been completed and it would slow efforts to meet the state's Clean Energy Initiative targets.

The Introducer of the bill on the House side has repeatedly demonstrated a hostility to environmental issues, a fundamental lack of understanding of the potential of the green economy and an undemocratic deviousness in his attempts to sabotage them. With all due respect, such neanderthal thinking should not be encouraged by your committee.

Testimony for ENE 3/20/2012 2:50:00 PM HB2417

Conference room: 225
Testifier position: Oppose
Testifier will be present: No
Submitted by: B.A. McClintock
Organization: Individual
E-mail: redahi@hawaii.rr.com
Submitted on: 3/19/2012

Comments:
Please OPPOSE this bill. There is room for improvement of the current programs, but changes resulting in large reductions of the state tax credit will have results that are counter to the states clean energy goals. Help keep the green job growth and local economy strong, and reduce our dependence on foreign oil