LATE

HOUSE COMMITTEE ON CONSUMER PROTECTION
AND COMMERCE Wednesday, March 20, 2013 — 2:30 p.m.

TESTIMONY
SUPPORTING SB 623 SD2 HD1 RELATING TO
RENEWABLE ENERGY

Chair McKelvey, Vice Chair Kawakami, and Members of the Committee:

Building Energy Group is in strong support of SB 623 SD2 HD1 with recommendations.

SB 623 SD2 HD1 collaboration with government and industry is our best chance for policy stability in the coming years from a tax credit perspective. The renewable energy industry faces such a high frequency of new challenges from policy to legislation to regulatory issues we've coined the industry phrase, "The Solar Coaster". This bill is a chance to firm up at least one factor in the coming years.

Much of the industry has submitted testimony related to photovoltaic so I am focusing here on Solar (hot water) Thermal. Solar Thermal is not affected by the electric utility grid but its impact can have significant peak load saving impact on the electric utility grid which furthers our goals as a State for energy stability.

- Section (a)(1) should be expanded to follow the Federal Internal Revenue Code definition of solar thermal property in IRC Section 48(a)(3)(A)(i), and makes it consistent with the existing definition of "energy property" in HRS Section 25-12.5.

Currently Section (a)(1) of SB623 SD2 HD1 limits the availability of the renewable energy tax credit hot water systems:

(1) For each solar energy [~~system:~~] property that is used exclusively to heat water and is installed and first placed in service in the State by a taxpayer during the taxable year:

The bill's definition of "Solar or wind energy property," however, leaves intact the existing definition in HRS 235-12.5 covering solar thermal which much more closely follows Federal law:

"Solar or wind energy [~~system"~~] property" means any identifiable facility, equipment, apparatus, or the like that converts solar or wind energy to useful thermal or electrical

energy for heating, cooling, or reducing the use of other types of energy that are dependent upon fossil fuel for their generation.

We strongly recommend that the Committee consider amending section (a)(1) of SB623 SD2 HD1 to cover other solar thermal technologies, as follows:

(1) For each solar energy [~~system:~~] property that ~~is used ex~~clusively to heat water heat or cool (or provide hot water for use in) a structure, or to provide solar process heat and is installed and first placed in service in the State by a taxpayer during the taxable year:

This suggested language follows the Federal Internal Revenue Code definition of solar thermal property in IRC Section 48(a)(3)(A)(i), and makes it consistent with the existing definition of "energy property" in HRS Section 25-12.5.

- Solar Thermal Offers Benefits Well Beyond Heating Water

  While the overwhelming majority of "solar thermal" installations currently being done are residential hot water systems, broader solar thermal technology offers tremendous opportunities to help the State achieve its renewable energy goals. Solar air-conditioning technology has made significant advances, and other solar thermal technologies can offer load-shifting and other capabilities that go well beyond hot water.

  In addition, because solar thermal technologies do not have to interface with the electrical grid, they are not constrained by the current challenges of high circuit penetration facing almost all areas of photovoltaic installations. Thus, solar thermal has the capacity to continue expanding our energy independence as our utilities work through the issues of absorbing more renewable electrical energy onto their grids.

  Finally, the renewable energy financing industry is only just beginning to work out viable means of providing financing to overcome the issue of high up-front capital costs that plagues the installation of all renewable energy systems. Continued inclusion of all solar thermal technologies in the Hawai`i renewable energy tax credit would allow this evolution to continue in Hawai`i.

- Cap Concept Should be Abandoned, or Cap Amount for Multi-Family Residential due to the fact that it is a limiting factor in designing.

  The current cap of $350 constrains design to $1000 of equipment per

unit and $500 would translate into $1428. The current single family dwelling cap for solar hot water is $2250 and that translates into $6428 of equipment. We propose a cap of $1000 for multi-family dwellings which translates into $2857 per unit for Multi-Family Dwellings which is proportionally closer to single family residential.

The current cap amounts in SB623 SD2 HD1 are blank, but previous versions of the legislation—specifically HB497—contained a cap of $500 per unit for multi-family residential properties.

We would strongly urge the Committee to consider getting away from "per system" caps entirely for solar thermal, just as SB623 has done for photovoltaic, and focus instead on setting a realistic credit percentage. Because solar thermal technology has not enjoyed the tremendous decline in cost that has occurred in photovoltaics, we think that the current 35% of eligible cost would be a good place to be.

Accordingly, we would recommend that Section (a)(1) of the bill be amended as follows:

(1) For each solar energy property that is used exclusively to ~~heat water~~ heat or cool (or provide hot water for use in) a structure, or to provide solar process heat and is installed and first placed in service in the State by a taxpayer during the taxable year:

thirty-five per cent of the basis; ~~up to the applicable cap amount,~~ ~~which is determined as follows:~~

~~(A) $ per property for single-family residential property;~~

~~(B) $ per unit per property for multi-family residential property; and~~

~~(C) $ per property for commercial property;~~

If the Committee elects to retain the caps, we recommend that the cap for multi-family be increased to $1000 per unit. Multi-family housing is an area that has been almost entirely passed over by the PV adoption wave that has swept Hawai`i, and solar thermal technologies offer particularly good opportunities in this area. The current cap of $350 is entirely inadequate to spur adoption of these solar thermal technologies in this important area, and even the $500 proposed by HB497 is insufficient.

Building Energy Group supports SB623 SD2 HD1, and we hope that the additional recommendations offered above regarding solar thermal may be of some use to the Committee. Thank you for the opportunity to provide this testimony.

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President
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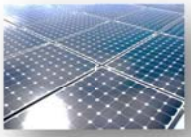
LATE



HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
March 20, 2013, 2:30 P.M.
Room 325
(Testimony is 5 pages long)

TESTIMONY IN SUPPORT OF SB 623 SD2 HD1, SUGGESTED AMENDMENTS

Chair McKelvey and members of the Consumer Protection & Commerce Committee:

The Blue Planet Foundation supports the intent of SB 623 SD2 HD1, a measure which seeks to make necessary amendments to Hawaii's highly successful clean energy tax credit incentive. This measure needs substantial amendments to make it an effective policy.

Solar energy is currently a bright spot in Hawaii's progress toward energy independence, and the solar tax credit has been extremely effective at making Hawai'i a leader in solar installations—creating local jobs and providing steady revenue from its business creation. Moreover, the installation of solar water heaters, photovoltaic systems, and wind systems helps to plug the leak of billions of dollars out of the islands' economy. Further, investments in this technology—and the companies and jobs that provide it—pays dividends back to the state in the form of income tax, general excise tax, and outside investment—among other forms.

Senate Bill 623 SD2 HD1 contains a number of elements which make it an attractive policy—for the state economy, the solar sector, and for achievement of Hawaii's aggressive clean energy goals. First, the measure follows the framework and definitions of the federal tax credit law, making it easier for the state to administer. Second, the proposed policy (with percentages similar to HB 497 HD3) ratchets down the state renewable energy tax credit for photovoltaic in a fair and predictable manner, reducing job-jeopardizing volatility in the solar sector.

Further, Blue Planet strongly supports a Production Tax Credit (PTC) for both utility-scale solar projects and smaller projects (if the small project owner prefers that use that incentive over the investment tax credit). A PTC would encourage the most efficient renewable energy installations while spreading out the cost of the credit over a longer period (likely 10-years).

Blue Planet has released a report in January, 2013, detailing the economic impacts of Hawai'i's renewable energy tax credit. The analysis, conducted by former University of Hawai'i economist

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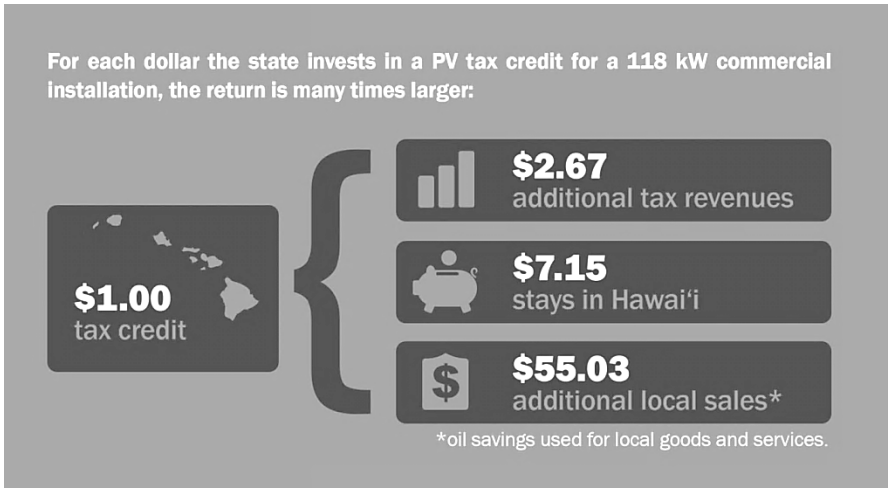
Dr. Thomas Loudat is updated from last spring, peer-reviewed, and includes demographic information from building permits for O‘ahu photovoltaic installations over the past 12 years. (Dr. Loudat’s earlier analysis of renewable energy tax credits was presented in a report to the state legislature in 2002.)



The findings show that the existing tax incentive yields a clear, significant net fiscal benefit to the state. Every commercial PV tax credit dollar invested yields $7.15 that stays in Hawai‘i and $55.03 in additional sales, which generates $2.67 in new tax revenue. For a typical 118 kW commercial PV installation, the state gains 2.7 local jobs each year over the 30-year lifetime of the system.

According to the state Department of Business, Economic Development, and Tourism (DBEDT), solar accounts for 15% of all construction expenditures in Hawai‘i. The solar industry employs more than 2,000 people locally.

Any stimulation in solar installations also brings federal dollars (from the 30% federal renewable energy tax credit) into our local economy. These dollars have a full multiplier effect equivalent to tourist dollars coming to Hawai‘i.

Blue Planet's analysis shows that the use of solar is increasing more rapidly in less wealthy neighborhoods. An examination of O‘ahu residential PV permits from the past decade indicates that while overall number of installations are located in zip codes that have higher median incomes, the rate at which PV installations occurred in 2012 versus 2002-2011 was significantly higher in lower median income areas. For example, Wai‘anae (with a median household income of $55,836) saw a 300% increase in PV permits in 2012 compared with the previous decade combined (173 total permits between 2002 and 2011; 521 permits in 2012 alone). Hawai‘i's solar tax credit—coupled with new third party-owned PV programs—have enabled a broadening range of O‘ahu homeowners to escape the burden of high energy costs and benefit from a clean energy solution.

PROPOSED AMENDMENTS

Blue Planet believes SB 623 SD2 HD1 should be amended in two critical ways before it can move forward as a viable bill: **first**, the tax credit percentages which were left blank in this version of the bill must be filled in; **second**, three critical technical amendments must be made

to avoid fatal implementation problems with the bill. We respectfully offer suggestions for these three areas below:

1. Tax Credit Percentages and Cap Amounts Must Be Filled In

The current version of SB 623 contains blanks in section (a) that must be completed. We recommend that the Committee re-insert the percentages and cap amounts contained in HB 497 HD3, which closely track the percentages and cap amounts contained in prior versions of SB 623. Specifically, we recommend the following numbers be used:

- For section (a)(1), solar thermal tax credit caps in the amounts of:
  - **$2,500** per property for single-family residential property;
  - **$500** per unit per property for multi-family residential property;
  - **$250,000** per property for commercial property
- For section (a)(2), solar tax credit percentages in the amounts of:
  - **30%** for property placed in service after December 31, 2012 and before January 1, 2014;
  - **25%** for property placed in service after December 31, 2013 and before January 1, 2016;
  - **20%** for property placed in service after December 31, 2015 and before January 1, 2018;
  - **15%** for property placed in service after December 31, 2017.
- For section (a)(3), production tax credit amounts of:
  - **8 cents/kWh** for solar energy property installed and placed in service on or before December 21, 2016;
  - **6 cents/kWh** for solar energy property installed and placed in service on or before December 31, 2020;
  - **4 cents/kWh** for solar energy property installed and placed in service after December 31, 2020.
- For section (a)(4), a cap on the utility-scale wind energy credit of **$500,000**.

2. Critical Technical Revisions

There are three critical technical revisions that must be made in order to avoid potentially serious or even fatal implementation problems with the legislation. These three technical amendments are: (a) to the definition of “Property”; (b) to the definition of “Basis”; and, (c) to clarify the availability of the credit for utility-scale wind energy property.

(a) Definition of “Property”

SB 623 rightly attempts to rely on the federal definition of energy “property” in its reform of HRS § 235-12.5 by defining “property” as having “the same meaning as in section 25D, 45, or section 48 of the Internal Revenue Code.” Unfortunately, however, “property” is not defined as a stand-alone term in any of those three sections of the IRC, and to the extent it is defined in conjunction

with other terms — e.g., “energy property” and “qualified solar electric property expenditure” — the definitions are inconsistent and/or contradictory. For example, “energy property” in Sec. 48 is defined so as to exclude property that is not depreciable, since Sec. 48 only applies to commercial property. This won’t work for HRS § 235-12.5, where the definition of property is intended to apply to both residential and commercial property. In any case, SB 623 SD2 HD1 maintains a tie-in to the Federal IRC for interpretation of these terms via its section (j), which provides that “The tax credits provided for in this section shall be construed in accordance with Treasury Regulations and judicial interpretations of similar provisions in sections 25D, 45, and 48 of the Internal Revenue Code.”

In order to address this technical flaw, we recommend that the definition of “Property” used in SB 623 SD2 HD1 be replaced with the following definition:

> “Property” means (i) equipment which uses wind or solar energy to generate electricity; (ii) the construction, reconstruction, or erection of which is completed by the taxpayer, or which is acquired by the taxpayer if the original use of such property commences with the taxpayer.

This proposed definition takes key elements of the federal law definition and applies them to HRS § 235-12.5 in a workable manner. Specifically, the proposed definition above:

- Copies language from Section 48(a)(3)(A)(i) to define solar and wind property as equipment that makes electricity from these resources;
- Copies language from Section 48(a)(3)(B)(i) to limit the credit to activities (construction, reconstruction, or erection) completed by the taxpayer; and,
- Copies language from Section 48(a)(3)(B)(ii) to clarify the taxpayer must be the original user of the property to qualify for the credit.

The proposed definition accomplishes the objective of following the federal law while allowing the definition to apply to both commercial and residential property. If the definition of “Property” in SB 623 SD2 HD1 is not amended, the definition will be meaningless since “property” is not, by itself, a defined term in any of the referenced federal statutes.

(b) Definition of “Basis”

SB 623 also rightly attempts to rely on federal law for the definition of “Basis.” The third sentence of the definition of “Basis” fully accomplishes this goal of “following the federal” by stating:

> “The basis used under this part shall be consistent with the use of basis in section 25D or section 48 of the Internal Revenue Code of 1986, as amended; provided that for the purposes of calculating the credit allowed under this chapter, the basis of the solar energy property or the wind energy property shall not be reduced by the amount of any federal tax credit or other federally subsidized energy financing received by the

taxpayer."

However, this approach is jeopardized by the preceding sentence in the definition of "Basis," which states that: "Any cost incurred and paid for the repair, construction, or reconstruction of a structure in conjunction with the installation and placing in service of solar or wind energy property shall not constitute a part of the basis for the purpose of this section." In fact, both federal law and the existing language of HRS § 235-12.5 allow for the repair, construction, or reconstruction of certain "structures," such as racking and mounting equipment used to support photovoltaic panels.

In order to include as part of the basis those costs which are legitimately necessary to and a part of the renewable energy installation while still preventing abuses, we suggest the following sentence be inserted between the second and third sentence of the definition:

> For the purposes of this section, the term "structure" shall not apply to facilities, equipment, mounting or support apparatus used primarily to support or to provide services for solar or wind energy property.

This added sentence will ensure that the Hawai'i definition of "Basis" is consistent with federal law and allows taxpayers to legitimately claim racking and mounting equipment and other support apparatus while still prohibiting re-roofing and other abuses.

(c) Clarification of the Credit for Utility Scale Wind Energy Property

It is our understanding that the intent of SB 623 SD2 HD1 is not to include a wind tax credit for projects larger than 1 MW. As drafted, however, a larger wind energy project comprised of turbines whose individual rated capacities are below 1 MW would arguably be eligible for an investment tax credit because it is possible that each turbine would be considered separate "property." If the intent of the Committee is to limit the investment tax credit's availability to solar and wind developments in which the overall project is less than 1 MW in size, the Committee may wish to substitute "not part of a larger wind energy property" in section (a)(4) with "not part of a larger wind energy development." A similar change could be made in section (a)(2) by replacing "not part of a larger solar energy property" with "not part of a larger solar energy development" or "not part of a larger solar energy facility."

Hawai'i's renewable energy tax credit is a catalyst in driving positive economic growth through solar. When we shift our energy dollars away from foreign oil and to local clean energy sources, those dollars circulate in Hawai'i's economy to the benefit of everyone. Ultimately, the tax credit is a smart investment in a better, cleaner tomorrow, a future we value beyond dollars and cents.

Please forward an amended SB 623 SD2 HD1.

Thank you for this opportunity to testify.

HAWAII ENERGY CONNECTION
Sustainable Energy Solutions

LATE

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To: Committee On Commerce & Consumer Protection

Re: Testimony on SB 623 SD 2 HD 1, Relating to solar tax credit

03/19/13

Hawaii Energy Connection, LLC (HEC) is a Hawaii based photovoltaic installation company with over 90 full time employees in addition to numerous independent sales representatives and outside contractors. HEC does work on all Islands in the State of Hawaii.

HEC is in support of SB 623 SD 2 HD1

HEC supports SB 623 SD 2 HD 1 and respectfully suggests the following amendments to fine-tune the new tax credit framework.

Stop ramp down at 20% for ITC

Although a ramp down of the ITC will slow the speed and scale of installations for Hawaiian homes and businesses, HEC has conceded to a gradual ramp down in the spirit of compromise, and an acknowledgment of budgetary concerns. However, recent data compiled by DBEDT using City and County of Honolulu permitting data has shown that permits issued for 2013 are already down 7.7% from the same period last year, which is most likely the result of the reduced credit currently available under the temporary administrative rules. As incentives are reduced, fewer consumers can afford PV, and history has shown that once incentives drop below 20%, participation abruptly drops off. HEC therefore asks that legislature stop the gradual reduction at 20%, rather than allowing it to drop to 15% as previously suggested

Chose a PTC equitable with ITC

HEC supports residential, commercial, and utility scale projects, and recognizes the importance of having a wide variety of energy strategies. However, installations of less than 1 MW have several benefits that utility scale projects do not. ITC or “roof-top” installations immediately reduce the customer’s electric bill, do not suffer from grid losses as the power is generated on site, and usually do not add to grid saturation due to the small size of the installations. Although it is true that utility scale projects incur expenses unique to large scale projects, utility scale projects also benefit from being able to deduct depreciation and other expenses, a benefit that homeowners are not able to apply.

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Therefore, HEC respectfully recommends that the legislature choose a rate for the production tax credit (PTC) that is comparable with the ITC. In addition, HEC recommends that the PTC credit gradually ramp down to reflect increasingly reduced install costs for utility scale projects, and to keep the ITC and PTC incentives equitable.

Apply the discount for the refundable credit to both ITC and PTC

HEC also respectfully recommends that a discount on the refundable credit be equally applied to both ITC and PTC projects. Allowing a refundable credit without discount for PTC gives an unwarranted advantage to PTC, and further encourages a framework that will send Hawaii dollars out of state. By applying the 30% discount to both ITC and PTC, the tax credit is applied more fairly, and companies which benefit from the PTC would be encouraged to hire local contractors and incur local tax liability.

Mahalo,

Chris DeBone
Managing partner
Hawaii Energy Connection, LLC

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LATE

HOUSE COMMITTEE CONSUMER PROTECTION & COMMERCE

March 20, 2013, 2:30 P.M.
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 623 SD2 HD1

Aloha Chair McKelvey and Members of the Committee:

The Sierra Club of Hawai'i, with over 10,000 members and supporters, ***strongly supports*** SB 623 SD2 HD1. This measure would advance the State's clean energy efforts setting up a long-term plan for our renewable energy tax credit to slowly wean down over time. It maintains an important policy tool intended to encourage investment in clean energy, reduce Hawai'i's dependence on unstable foreign oil, and improve Hawai'i's environment.

Our renewable energy tax credit is an important investment for the state. Hawai'i depends on imported oil for nearly 90% of its energy needs. This dependence results in the outflow of the State's financial resources and creates a tenuous reliance on an unsustainable and unstable resource. Moreover, with the increased certainty of climate change as a result of fossil fuel usage and the emerging treaties on greenhouse gas emissions, as well as the global depletion of natural resources, encouragement of renewable energy sources is timely and strategic.

Hawai'i has been a leader in the inevitable renewable energy revolution—but continued success will take a continued commitment from the public policy makers. This measure shows that commitment, but also sets up a long-term path for the solar industry to eventually compete without government assistance.

Mahalo for the opportunity to testify.

firstwind
CLEAN ENERGY. MADE HERE.

LATE

TESTIMONY SUPPORTING S.B. 623 HD1
KELLY O'BRIEN, VICE-PRESIDENT FOR DEVELOPMENT
FIRST WIND

REGARDING S.B. 623 HD1, RELATING TO RENEWABLE ENERGY

BEFORE THE
HAWAIʻI STATE LEGISLATURE
HAWAIʻI HOUSE OF REPRESENTATIVES
CONSUMER PROTECTION AND COMMERCE COMMITTEE

WEDNESDAY, MARCH 20, 2013
CONFERENCE ROOM 225
2:30 P.M.

Aloha, Chairman McKelvey, Vice Chairman Kawakami and Distinguished Members of the Committee on Consumer Protection and Commerce. My name is Kelly O'Brien and I am the Vice-President for Development for First Wind.

First Wind has been developing and operating utility scale wind energy projects in Hawaiʻi since 2006 and to date has invested nearly $600 million in Hawaiʻi. We own and operate Kaheawa Wind Power I & II on Maui (51 MW) and Kahuku Wind Power (30 MW) and Kawailoa Wind Power (69 MW) on Oʻahu. First Wind currently employs 25 people in Hawaiʻi with plans to add 5 more in the near term. We are also involved with several utility-scale solar projects in Hawaiʻi. We are firmly committed to helping to improve Hawaiʻi's energy security by decreasing its reliance on fossil fuels for its energy needs. We have a demonstrated record in establishing long-term dialogues and partnerships with the communities we join and we are proud of our accomplishments in establishing successful Habitat Conservation Plans for our projects which ensure a "net benefit" to native wildlife that could be affected by our projects.

Hawaiʻi has made great strides in utilizing renewable resources for its electricity needs in the past decade, much more needs to be done to decrease Hawaiʻi's reliance on fossil fuels. Renewable Energy tax credits have a significant economic impact on each project. While First Wind supports the concept of tax credits for residential, commercial and feed-in-tariff solar projects, we are not taking a position on how the credits for those projects should be structured. Our interests are in the area of solar tax credits for utility-scale projects.

First Wind supports efforts to establish a consistent tax credit structure that ensures a level playing field for all utility-scale project developers and protects the interests of development projects that are already substantially complete. First Wind believes that S.B. 623 HD1 meets both of those objectives. Additionally, First Wind recommends that the tax credit for projects in Section (a)(3)(A) be eight (8) cents per kilo-watt hour sold for the first one hundred twenty months of operation. We believe this allows these projects to maintain substantially the same economics they had anticipated under the former tax rules.

First Wind supports S.B. 623 HD1. Thank you for the opportunity to testify on this bill.

LATE

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE
Wednesday, March 20, 2013 — 2:30 p.m.

SUPPLEMENTARY TESTIMONY
SUPPORTING SB 623 SD2 HD1 RELATING TO RENEWABLE ENERGY

Chair McKelvey, Vice Chair Kawakami, and Members of the Committee:

Kairos Energy Capital submitted testimony previously in support of SB 623 SD2 HD1. After further study of the bill, we wish to submit this supplementary testimony calling the attention of the Committee to an issue not mentioned in our earlier testimony.

- **Section (a)(1) Should Be Corrected to Reflect All Solar Thermal, Not Just Hot Water.**

Currently Section (a)(1) of SB623 SD2 HD1 limits the availability of the renewable energy tax credit hot water systems:

> (1) For each solar energy [~~system:~~] property that is used exclusively to heat water and is installed and first placed in service in the State by a taxpayer during the taxable year:

The bill's definition of "Solar or wind energy property," however, leaves intact the existing definition in HRS 235-12.5 covering solar thermal which much more closely follows Federal law:

> "Solar or wind energy [~~system"~~] property" means any identifiable facility, equipment, apparatus, or the like that converts solar or wind energy to useful thermal or electrical energy for heating, cooling, or reducing the use of other types of energy that are dependent upon fossil fuel for their generation.

We strongly recommend that the Committee consider amending section (a)(1) of SB623 SD2 HD1 to cover other solar thermal technologies, as follows:

> (1) For each solar energy [~~system:~~] property that is used exclusively to ~~heat water~~ heat or cool (or provide hot water for use in) a structure, or to provide solar process heat and is installed and first placed in service in the State by a taxpayer during the taxable year:

This suggested language follows the Federal Internal Revenue Code definition of solar thermal property in IRC Section 48(a)(3)(A)(i), and makes it consistent with the existing definition of "energy property" in HRS Section 25-12.5.

- **Solar Thermal Offers Benefits Well Beyond Heating Water**

While the overwhelming majority of "solar thermal" installations currently being done are residential hot water systems, broader solar thermal technology offers tremendous opportunities to help the State achieve its renewable energy goals. Solar air

conditioning technology has made significant advances, and other solar thermal technologies can offer load-shifting and other capabilities that go well beyond hot water.

In addition, because solar thermal technologies do not have to interface with the electrical grid, they are not constrained by the current challenges of high circuit penetration facing almost all areas of photovoltaic installations. Thus, solar thermal has the capacity to continue expanding our energy independence as our utilities work through the issues of absorbing more renewable electrical energy onto their grids.

Finally, the renewable energy financing industry is only just beginning to work out viable means of providing financing to overcome the issue of high up-front capital costs that plagues the installation of all renewable energy systems. Continued inclusion of all solar thermal technologies in the Hawai`i renewable energy tax credit would allow this evolution to continue in Hawai`i.

- **Cap Concept Should be Abandoned, or Cap Amount for Multi-Family Residential Should be More Realistic**

The current cap amounts in SB623 SD2 HD1 are blank, but previous versions of the legislation—specifically HB497—contained a cap of $500 per unit for multi-family residential properties.

We would strongly urge the Committee to consider getting away from "per system" caps entirely for solar thermal, just as SB623 has done for photovoltaic, and focus instead on setting a realistic credit percentage. Because solar thermal technology has not enjoyed the tremendous decline in cost that has occurred in photovoltaics, we think that the current 35% of eligible cost would be a good place to be.

Accordingly, we would recommend that Section (a)(1) of the bill be amended as follows:

> (1) For each solar energy property that is used exclusively to ~~heat water~~ heat or cool (or provide hot water for use in) a structure, or to provide solar process heat and is installed and first placed in service in the State by a taxpayer during the taxable year: thirty-five per cent of the basis; ~~up to the applicable cap amount, which is determined as follows:~~
>
> ~~(A) $ per property for single-family residential property;~~
>
> ~~(B) $ per unit per property for multi-family residential property; and~~
>
> ~~(C) $ per property for commercial property;~~

If the Committee elects to retain the caps, we recommend that the cap for multi-family be increased to $1000 per unit. Multi-family housing is an area that has been almost entirely passed over by the PV adoption wave that has swept Hawai`i, and solar thermal technologies offer particularly good opportunities in this area. The current cap of $350 is entirely inadequate to spur adoption of these solar thermal technologies in this important area, and even the $500 proposed by HB497 is insufficient.

Kairos Energy Capital supports SB623 SD2 HD1, and we hope that the additional recommendations offered above regarding solar thermal may be of some use to the Committee. Thank you for the opportunity to provide this testimony.

Larry Gilbert
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LATE

TESTIMONY SUPPORTING THE INTENT OF SB 623, SD 2, HD 1

To: Honorable Angus McKelvey, Chair, House Committee on Consumer Protection and Commerce

From: SolarCity

Hearing on Mar. 20, 2013, at 2:30 p.m., Room 325

Aloha Chair McKelvey, Vice Chair Kawakami, and Members of the Committee:

Thank you for the opportunity to provide testimony supporting the intent of SB 623, SD 2, HD 1, which balances Hawaii's pursuit of a clean energy future with the cost of the Renewable Energy Technologies Income Tax Credit (RETITC).

We respectfully request the Committee to amend SB 623, SD 2, HD 1 to fully address four important issues.

1. **Fill in Tax Credit Percentages and Cap Amounts**

   The current version of SB 623 contains blanks that must be filled in. We recommend that the Committee insert the percentages and cap amounts contained in HB 497, HD 3, which closely track the percentages and cap amounts contained in prior versions of SB 623.

2. **Replace Production Tax Credit Provisions with Compromise Language**

   SB 623, SD 2, HD 1 contains a two-tiered production tax credit rate for projects larger than 1 MW. One rate is a "base" rate and the other is a "grandfathered" rate for projects already in process.

We recommend that section (a)(3) of SB 623, SD 2, HD 1 be replaced with “compromise” language developed by industry stakeholders.

The suggested language is as follows:

(a)(3) For each solar energy property that is used to generate electricity and is one megawatt or larger in alternating current capacity:

(A) For solar energy property that is placed in service on or before December 31, 2016, eight cents multiplied by the number of kilowatt hours produced by the solar energy property and sold by the taxpayer to an unrelated entity during the taxable year, or produced by the solar energy property and used on-site to offset the site’s demand for electricity during the taxable year, for the first ten years the solar energy property is in service;

(B) For solar energy property that is placed in service after December 31, 2016, but on or before December 31, 2020, six cents multiplied by the number of kilowatt hours produced by the solar energy property and sold by the taxpayer to an unrelated entity during the taxable year, or produced by the solar energy property and used on-site to offset the site’s demand for electricity during the taxable year, for the first ten years the solar energy property is in service; and

(C) For solar energy property that is placed in service after December 31, 2020, four cents multiplied by the number of kilowatt hours produced by the solar energy property and sold by the taxpayer to an unrelated entity during the taxable year, or produced by the solar energy property and used on-site to offset the site’s demand for electricity during the taxable year, for the first ten years the solar energy property is in service.

This approach will be easier to administer than determining which projects had met certain milestones as currently contemplated by SB 623, SD 2, HD 1. Moreover, this approach will be good for the general fund because the credit will be paid out over ten years and because the value of the credit declines over time.

3. Revise Definitions of Property and Basis

The definition of "Property" and the definition of "Basis" should be amended to avoid implementation problems.

Definition of "Property"—SB 623 rightly attempts to rely on the federal definition of energy "property" in its reform of HRS § 235-12.5 by defining "property" as having "the same meaning as in section 25D, 45, or section 48 of the Internal Revenue Code." However, "property" is not defined as a stand-alone term in any of those three sections of the IRC, and to the extent it is defined in conjunction with other terms — e.g., "energy property" and "qualified solar electric property expenditure" — the definitions are inconsistent and/or contradictory.

In order to address this flaw, we recommend that the definition of "Property" used in SB 623, SD 2, HD 1 be replaced with the following definition:

"Property" means (i) equipment which uses wind or solar energy to generate electricity; (ii) the construction, reconstruction, or erection of which is completed by the taxpayer, or which is acquired by the taxpayer if the original use of such property commences with the taxpayer.

This proposed definition takes the key elements of the federal law definitions and applies them to HRS § 235-12.5 in a workable manner.

Definition of "Basis"—the second sentence of the definition of "Basis" in SB 623, SD 2, HD 1 should be deleted in order to avoid any conflict with federal law.

Federal law, as well as the existing Hawai‘i RETITC, allows for costs associated with the construction, installation, and placing in service of the solar or wind energy property to constitute part of the basis. The second sentence of the definition of “Basis” would severely limit the use of the credit and should be deleted.

4. **Include Language to Allow the Credit to Pass Through**

   Language allowing the credit to pass through to investors, similar to federal law, should be added to SB 623, SD 2, HD 1. This would attract more outside investment and decrease reliance on the refundable credit.

Once again we support this bill, and we hope that the technical recommendations offered above may be of some use to the Committee. Thank you for the opportunity to provide this testimony.

Mahalo,

Jon Yoshimura, Director of Government Affairs, Hawaii

LATE

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE
HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECITON

SB 623 SD2 HD1, RELATING TO RENEWABLE ENERGY

March 20, 2013

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

The purposes of SB 623 SD2 are to: (i) replace the current renewable energy technology systems tax credit with tax credits for solar energy property and wind energy property, and (ii) require DOTAX and DBEDT to report tax credits claimed under section 235-12.5, HRS.

HREA **supports the intent this measure** with the following comments:

1) Residential-Small Commercial-Scale (<1 MW). SB 623 SD2 HD1 contains "blanks" in sections (a)(1), (a)(2), and (a)(4). We recommend that the Committee insert the percentages and cap amounts (contained in HB 497 HD3 into the "blanks").
2) Utility-Scale Solar-Electric (≥ 1 MW). Similarly, there are "blanks: in section (a)(3) - the PTC for utility-scale projects. HREA supports the following values for the PTC:
   a) 8 cents/kWh. For projects installed on or before 12-31-2016.
   b) 6 cents/kWh. For projects installed after 12-31-2016 and on or before 12-31-2020, and
   c) 4 cents/kWh. For projects installed after 12-31-2020.
3) Two Suggested Amendments for the Committee's Consideration:
   a) Multiple Owners. On p.5, l.6, replace the word "between" with "among," and delete the remaining text after owner. Note: the methodology for distribution among owners is covered in lines 11 to 15 on page 5.
   b) Comfort Letters. On p.14, l.1, replace the word "may" with the word "shall." This amendment will provide assurance to those developers with "comfort letters," that they will have the stated option as proposed in paragraph (l) on pages 13 and 14 of this measure.

Mahalo for this opportunity to testify.

LATE

RISINGSUN SOLAR+ELECTRIC

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE
Wednesday, March 20, 2013 — 2:30 p.m.

TESTIMONY SUPPORTING SB 623 SD2 HD1 RELATING TO RENEWABLE ENERGY

Chair McKelvey, Vice Chair Kawakami, and Members of the Committee:

Rising Sun Solar **supports** SB 623 SD2 HD1, which will reform the Renewable Energy Technologies Income Tax Credit ("RETITC") while maintaining the viability of the solar industry. SB 623 SD2 HD1 will save the State tens of millions of dollars in tax credit related outlays, while continuing to promote solar energy technologies that will allow Hawai'i to reach its clean energy goals and reduce our depends on imported fossil fuels.

However, there are two critical areas in which SB 623 SD2 HD1 should be amended before it can move forward as a viable bill: **first**, the tax credit percentages which were left blank in this version of the bill must be filled in; **second**, three critical technical amendments must be made to avoid fatal implementation problems with the bill. We respectfully offer suggestions for these three areas below:

1. Tax Credit Percentages and Cap Amounts Must Be Filled In

The current version of SB 623 contains blanks in section (a) that must be filled in. We recommend that the Committee re-insert the percentages and cap amounts contained in HB 497 HD3, which closely track the percentages and cap amounts contained in prior versions of SB 623. Specifically, we recommend the following numbers be used:

- For section (a)(1), solar thermal tax credit caps in the amounts of:
  - **$2,500** per property for single-family residential property;
  - **$500** per unit per property for multi-family residential property;
  - **$250,000** per property for commercial property
- For section (a)(2), solar tax credit percentages in the amounts of:
  - **30%** for property placed in service after December 31, 2012 and before January 1, 2014;
  - **25%** for property placed in service after December 31, 2013 and before January 1, 2016;
  - **20%** for property placed in service after December 31, 2015 and before January 1, 2018;
  - **15%** for property placed in service after December 31, 2017.
- For section (a)(3), production tax credit amounts of:

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- **8 cents/kWh** for solar energy property installed and placed in service on or before December 21, 2016;
- **6 cents/kWh** for solar energy property installed and placed in service on or before December 31, 2020;
- **4 cents/kWh** for solar energy property installed and placed in service after December 31, 2020.

- For section (a)(4), a cap on the utility-scale wind energy credit of **$500,000**.

2. Critical Technical Revisions

There are three critical technical revisions that must be made in order to avoid potentially serious or even fatal implementation problems with the legislation. These three technical amendments are: (a) to the definition of "Property"; (b) to the definition of "Basis"; and, (c) to clarify the availability of the credit for utility-scale wind energy property.

(a) Definition of "Property"

SB 623 rightly attempts to rely on the federal definition of energy "property" in its reform of HRS § 235-12.5 by defining "property" as having "the same meaning as in section 25D, 45, or section 48 of the Internal Revenue Code." Unfortunately, however, "property" is not defined as a stand-alone term in any of those three sections of the IRC, and to the extent it is defined in conjunction with other terms — e.g., "energy property" and "qualified solar electric property expenditure" — the definitions are inconsistent and/or contradictory. For example, "energy property" in Sec. 48 is defined so as to exclude property that is not depreciable, since Sec. 48 only applies to commercial property. This won't work for HRS § 235-12.5, where the definition of property is intended to apply to both residential and commercial property. In any case, SB 623 SD2 HD1 maintains a tie-in to the Federal IRC for interpretation of these terms via its section (j), which provides that "The tax credits provided for in this section shall be construed in accordance with Treasury Regulations and judicial interpretations of similar provisions in sections 25D, 45, and 48 of the Internal Revenue Code."

In order to address this technical flaw, we recommend that the definition of "Property" used in SB 623 SD2 HD1 be replaced with the following definition:

> <u>"Property" means (i) equipment which uses wind or solar energy to generate electricity; (ii) the construction, reconstruction, or erection of which is completed by the taxpayer, or which is acquired by the taxpayer if the original use of such property commences with the taxpayer.</u>

This proposed definition takes key elements of the federal law definition and applies them to HRS § 235-12.5 in a workable manner. Specifically, the proposed definition above:

- Copies language from Section 48(a)(3)(A)(i) to define solar and wind property as equipment that makes electricity from these resources;
- Copies language from Section 48(a)(3)(B)(i) to limit the credit to activities (construction, reconstruction, or erection) completed by the taxpayer; and,
- Copies language from Section 48(a)(3)(B)(ii) to clarify the taxpayer must be the original user of the property to qualify for the credit.

The proposed definition accomplishes the objective of following the federal law while allowing the definition to apply to both commercial and residential property. If the definition of "Property" in SB 623 SD2 HD1 is not amended, the definition will be meaningless since "property" is not, by itself, a defined term in any of the referenced federal statutes.

(b) Definition of "Basis"

SB 623 also rightly attempts to rely on federal law for the definition of "Basis." The third sentence of the definition of "Basis" fully accomplishes this goal of "following the federal" by stating:

> "The basis used under this part shall be consistent with the use of basis in section 25D or section 48 of the Internal Revenue Code of 1986, as amended; provided that for the purposes of calculating the credit allowed under this chapter, the basis of the solar energy property or the wind energy property shall not be reduced by the amount of any federal tax credit or other federally subsidized energy financing received by the taxpayer."

However, this approach is jeopardized by the preceding sentence in the definition of "Basis," which states that: "Any cost incurred and paid for the repair, construction, or reconstruction of a structure in conjunction with the installation and placing in service of solar or wind energy property shall not constitute a part of the basis for the purpose of this section." In fact, both federal law and the existing language of HRS § 235-12.5 allow for the repair, construction, or reconstruction of certain "structures," such as racking and mounting equipment used to support photovoltaic panels.

In order to include as part of the basis those costs which are legitimately necessary to and a part of the renewable energy installation while still preventing abuses, we suggest the following sentence be inserted between the second and third sentence of the definition:

> <u>For the purposes of this section, the term "structure" shall not apply to facilities, equipment, mounting or support apparatus used primarily to support or to provide services for solar or wind energy property.</u>

This added sentence will ensure that the Hawai'i definition of "Basis" is consistent with federal

law and allows taxpayers to legitimately claim racking and mounting equipment and other support apparatus while still prohibiting re-roofing and other abuses.

(c) Clarification of the Credit for Utility Scale Wind Energy Property

It is our understanding that the intent of SB 623 SD2 HD1 is not to include a wind tax credit for projects larger than 1 MW. As drafted, however, a larger wind energy project comprised of turbines whose individual rated capacities are below 1 MW would arguably be eligible for an investment tax credit because it is possible that each turbine would be considered separate "property." If the intent of the Committee is to limit the investment tax credit's availability to solar and wind developments in which the overall project is less than 1 MW in size, the Committee may wish to substitute "not part of a larger wind energy property" in section (a)(4) with "not part of a larger wind energy development." A similar change could be made in section (a)(2) by replacing "not part of a larger solar energy property" with "not part of a larger solar energy development" or "not part of a larger solar energy facility."

Once again we support this bill, and we hope that the technical recommendations offered above may be of some use to the Committee. Thank you for the opportunity to provide this testimony.

Sincerely,

Bradley Albert

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