NEIL ABERCROMBIE
GOVERNOR

SHAN TSUTSUI
LT. GOVERNOR

FREDERICK D. PABLO
DIRECTOR OF TAXATION

JOSHUA WISCH
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF TAXATION
P.O. BOX 259
HONOLULU, HAWAII 96809
PHONE NO: (808) 587-1530
FAX NO: (808) 587-1584

To: The Honorable Chris Lee, Chair
and Members of the House Committee on Energy & Environmental Protection

Date: Tuesday, February 5, 2013
Time: 10:00 a.m.
Place: Conference Room 325, State Capitol

From: Frederick D. Pablo, Director
Department of Taxation

Re: H.B. 1408 Relating to Renewable Energy

The Department of Taxation (Department) appreciates the intent of H.B. 1408, but prefers H.B. 967. We offer the following summary and comments on H.B. 1408 for your consideration:

Part I, Section 1, creates a new section in Chapter 235, Hawaii Revised Statutes (HRS), that sets an aggregate credit cap amount for commercial non-utility scale solar energy properties. The Department of Business, Economic Development, and Tourism (DBEDT) would be required to certify that the solar energy property qualifies for the tax credit. DBEDT would then determine the order in which the tax credits are claimed and contact the taxpayers. The Department has serious concerns regarding aggregate caps and allowing other agencies to certify tax credits. Issues arise when the certifying agency provides erroneous advice or wrongfully certifies the tax credit. In these cases, the Department is placed in a difficult situation to resolve the problems for taxpayers. The aggregate cap system in this bill also does not seem to limit the credit amount that one taxpayer could claim. Thus, it is conceivable that the first taxpayer in the order of qualification could claim the entire amount. This is likely to create taxpayer uncertainty and defeat the purpose of providing the tax credit.

Part I, Section 2, amends Hawaii Revised Statutes (HRS) section 235-12.5 by:

- Providing a renewable energy tax credit for solar energy property that produces electricity for residential use at a rate of 30% for solar energy property placed in service between January 1, 2013, and December 31, 2013; 25% between January 1, 2014, and December 31, 2015; and 20% thereafter. The tax credits claimed under this provision are subject to a $12,500 cap if the electricity is for residential use and a $500,000 cap for commercial non-utility scale installations.

A fixed percentage, rather than a sliding scale, will be substantially easier for the Department to administer. The Department notes that the declining rates for each year will create an unnecessary rush for systems to be installed and placed in service at the end of each year. This rush will cause compliance and enforcement issues for the Department, because taxpayers have an incentive to claim the credit in the earlier year. In addition, the Department does not believe that the declining rates are necessary if the credit rate is set reasonably, because the actual credit amount will increase and decrease with changes in the price of the equipment and installation.

- The caps set forth in this bill are not defined and are, therefore, ineffective. In its current form, the Department will not be able to enforce the caps in this measure. If the Committee believes it is necessary to retain the caps, the Department suggests that the "per system" language be retained, since "system" has already been defined through administrative rules.

- Providing a renewable energy credit for wind energy property at a rate of 20%.

- Providing a credit for residential solar water heaters at a rate of 35% capped at $2,500, and $250,000 for commercial non-utility scale solar water heaters.

- Providing a solar production credit at 8 cents per kilowatt hour produced during the first 10 years of the system's operation for ordinary utility-scale solar systems. The Department notes that the federal production credit only provides 2.2 cents per kilowatt hour produced and sold. This bill provides for a production credit that is more than five times the amount of the federal tax credit and allows for the claiming of tax credit for electricity that is simply generated, but not sold. Deviating from the federal requirement will greatly increase the compliance and enforcement issues for the Department. Instead, the Department suggests that the language of this provision be changed from "produced" to "produced and sold". Also, the Department notes that, as currently written, a utility-scale installation could conceivably claim both the infrastructure credit and the production credit. If the Committee does not intend to allow for the claiming of both types of tax credit for the same project, the Department suggests express provisions stating such.

- Providing a wind production credit at a rate of 15 cents per kilowatt hour produced and sold. As stated above, the Department notes that a production credit should be based on electricity produced and sold.

- The Department also suggests that the definition of "basis" be amended so that the definition is consistent with allowable costs under Internal Revenue Code sections 25D and 48. This amendment would ease the administration of the tax credit for the Department.

Part II, Section 3, allows independent power producers not currently regulated by the Public Utilities Commission that have submitted an agreement for approval with a public utility by March 31, 2013, to claim the credit as authorized in 2012. The Department is strongly opposed to the grandfathering aspect of this provision. This provision presents substantial compliance and enforcement problems for the Department due to the lack of clarity prior to the issuance of the administrative rules.

Thank you for the opportunity to provide comments.

Sierra Club
Hawai'i Chapter
PO Box 2577, Honolulu, HI 96803
808.538.6616 hawaii.chapter@sierraclub.org

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

February 5, 2013, 10:00 A.M.
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 1408 WITH PROPOSED AMENDMENTS

Aloha Chair Lee and Members of the Committee:

The Sierra Club of Hawai'i, with over 10,000 members and supporters, supports the intent of HB 1408. 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. The Sierra Club would prefer to see the caps removed from the measure, however, so as to ensure the law can be easily administered without some of the difficulties from prior years.

This measure smartly sets up a schedule to wean down the tax credit over time and as the solar industry becomes more and more able to compete with oil on a cost basis. 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.

While we appreciate the intent of placing a total "cap" on the amount of tax credit that could be collected per installation, we have concerns about how this would be applied. The cap on utility scale and commercial scale PV is probably too low and could result in a drastic slow down of installations. We have no problems with the amount of the residential cap, however, past experiences has proven this is a difficult concept to manage. DoTax will have difficulty determining what is a "dwelling," thus leading to more accusations of cheating and fraud. The minimal advantage of a cap may be outweighed by the problems of administering this concept.

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. We appreciate the efforts to hear these bills and advance a comprehensive solution.

Mahalo for the opportunity to testify.

Email: communications@uluponoinitiative.com

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Tuesday, February 5, 2013 — 10 a.m. — Room 325

Ulupono Initiative Supports the Intent of HB 1408, Relating to Renewable Energy

Chair Lee, Vice Chair Thielen, and Members of the Committee:

My name is Kyle Datta, General Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally grown food, increase renewable energy, and reduce/recycle waste.

Ulupono **supports the intent** of HB 1408, which will make needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") to reduce the credit's cost to the State. However, we believe that HB 756 is a more effective way to make those same reforms, while also making the RETITC easier to administer and maintaining the viability of all sectors of the solar industry.

First, HB 756 more closely follows the federal tax credit structure. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. This will benefit not only the Department but also all stakeholders, including households, businesses, and contractors, as well as lessors and other funders of solar projects.

Second, HB 756 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Although HB 1408 will preserve the residential market, its per-credit cap for commercial systems and its aggregate cap amounts for utility-scale projects would be devastating to those sectors of the industry. By contrast, HB 756 provides a more balanced approach that makes cuts to—but ultimately preserves—all sectors of the industry. By preserving the viability of all segments of Hawai'i's solar industry, HB 756 will lead to a higher level of renewable energy installation at a lower cost to the State. In doing so, it will maximize the use of State tax dollars and keep Hawai'i on the path to achieving its clean energy goals.

Ulupono therefore recommends that you pass HB 756 to reform the RETITC rather than HB 1408. Thank you for the opportunity to provide this testimony.

Sincerely,

Kyle Datta
General Partner

Pacific Guardian Center, Mauka Tower
737 Bishop Street, Suite 2350, Honolulu, HI 96813

808 544 8960 o | 808 544 8961 f
www.uluponoinitiative.com

Clean Power Finance

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

TESTIMONY SUPPORTING THE INTENT OF HB 1408 RELATING TO RENEWABLE ENERGY

Testimony of
Robert E. Prigge, Chief Commercial Officer of Clean Power Finance, Inc.
Tuesday, February 5, 2013
House Conference Room

Chair Lee, Vice Chair Thielen, and Members of the Committee:

Clean Power Finance, Inc. supports the intent of HB 1408, which will make needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") to reduce the credit's cost to the state. However, we believe that HB 756 is a more effective way to make those same reforms, while also making the RETITC easier to administer and maintaining the viability of all sectors of the solar industry.

First, HB 756 more closely follows the federal tax credit structure. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. This will benefit not only the Department but also all stakeholders, including households, businesses, and contractors, as well as lessors and other funders of solar projects.

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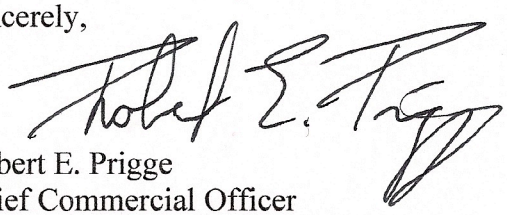
201 Mission Street, Suite 1100, San Francisco, CA 94105 Tel: 866.525.2122 Fax: 415.817.0961

Clean Power Finance

At Clean Power Finance, Inc. our mission is to drive the mass-market adoption of residential solar by building an online business-to-business marketplace to connect industry professionals who need finance products with investors looking for stable investments. We have invested heavily in the solar market in Hawai'i and already work with some of the largest solar resellers there. Clean Power Finance, Inc. therefore recommends that you pass HB 756 to reform the RETITC rather than HB 1408. Thank you for the opportunity to provide this testimony.

Sincerely,



Robert E. Prigge
Chief Commercial Officer
Clean Power Finance, Inc.

Hawaii Solar Energy Association
Serving Hawaii Since 1977

Before the House Committee on Energy and Environmental Protection
February 5, 2013, 10:00 AM, Conference Room 325
HB 1408: RELATING TO RENEWABLE ENERGY

Aloha Chair Lee, Vice-Chair Thielen, and members of the House Committee on Energy and Environmental Protection,

On behalf of the Hawaii Solar Energy Association (HSEA), I would like to testify **in support of HB 1408**, which proposes to amend the renewable energy tax credit by gradually reducing the residential PV credit to 20%, holding the SHW credit at 35%, and instituting a sunset date in 2019. HSEA is a non-profit trade organization that has been advocating for solar energy since 1977, with an emphasis on residential distributed generation (DG) and commercial for both solar hot water (SHW) and photovoltaics (PV). We currently represent 71 companies, and our members include installers, contractors, manufacturers, distributers, the utility, and others. With 35 years of advocacy behind us, HSEA's goal is to work for a sustainable energy future for all of Hawaii.

Solar is Key to our Green Energy Future

The importance of this legislation cannot be overstated. Hawaii is dangerously dependent upon imported fossil fuels, and the cost and uncertainty of fossil fuels will only increase. Recent reports have indicated that oil may reach $180/barrel by 2020, and scientists have found that climate change has exacerbated global warming more than they believed, with recent studies showing that the Antarctic is warming at three times the predicted rate. Transforming our electrical grid to a green energy infrastructure will bring both added security and stability to our state's economy, and also contribute to an overall reduction of greenhouse gasses for everyone.

Four bills currently before the committee

EEP currently has four bills before it that seek to create a new tax credit framework that will be fair and clear and serve to support Hawaii's clean energy goals. Each bill has merit in its own regard, and to make the discussion more streamlined, I've compared each bill under the two key areas of ramp down, and sunset, with additional comments on unique features of each bill in the summary.

1. Ramp Down

HSEA does not currently support a ramp down of the renewable energy tax credit. Now is not the time to slow the speed and scale of installations, especially given the urgency of our clean energy goals, and the specter of losing the 30% federal credit in 2016. In addition, although HSEA supports all solar installations from DG to utility scale, we believe that DG is vital to Hawaii's green energy infrastructure. DG has several advantages over utility scale installations. First, the installation is not delayed by years of permitting and financial issues, and once installed

the utility customer gets an immediate savings—a true power to the people. In addition, because of the relatively small scale of DG projects, grid saturation is rarely an issue, and transmission loss never is. DG in aggregate has made substantial contributions to our overall energy goals, and it should be seen as a vital part of our energy mix.

PV v. SHW

Another important distinction in the ramp down question is the difference between PV and SHW, and the unique advantages of SHW. Because SHW does not produce electricity, it does not add to the load on the grid, and unlike a PV system, hot water stored in SHW can be used during the evening peak after the sun's gone down. The cost for SHW has not come down, so the same logic for a ramp down does not apply to SHW. SHW is seen as an efficiency measure, and the state should continue to support such a cost-effective and efficient technology.

Key ramp down questions

Despite the fact that a ramp down of the credit will slow the speed and scale of installation of the most grass roots energy you can find, HSEA understands that the politics of the tax credits demand a reduction. The question is then: how much and how fast?

HB 967: HB drops the tax credit to an immediate 15%. This drop would add about $7,000 to an average sized system for the homeowner, putting it out of reach for most families. In 1985 when President Regan eliminated the solar tax credit for solar hot water, it increased the cost of a system by about $1,500. As a result of this drop, Hawaii saw solar hot water installations plummet by 93%. We believe that a similar abrupt and radical drop proposed by HB 967 will severely slow both PV and SHW installations.

HB 1408: ramp down from 30 to 20% for PV. 35% for SHW. A gradual ramp down for PV keeps it affordable, and allows industry to adjust. SHW at 35% reflects rising price and need for ongoing incentive.

HB 756: gradual ramp down to 10% for both PV and SHW. Ramp down to 10% would add about $9,000 to PV system, which doesn't include the amount lost from the expired federal tax credit. Would severely impact both SHW and PV, and push the market almost exclusively to leases. Would also greatly favor utility scale installations, at the expense of DG.

HB 497: gradual ramp down from 35% to 20% for PV. Holds steady at 35% for SHW. Supports sustained PV and SHW DG installation, and gives the signal that residential and commercial non-utility scale solar continues to be a vital part of our clean energy infrastructure.
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2. Sunset Date

HSEA supports a review date rather than a sunset date. We believe that a sunset date creates an artificial deadline for business that impedes development and assumes that incentives will no longer be necessary even though Hawaii is long from energy independence and costs will probably increase.

HB 967: Sunsets December 31, 2016, the same deadline as the federal tax credit. Unless Hawaii has reached it clean energy goals by 2016 and we no longer depend upon imported fossil fuels, it makes no sense to end incentives for clean energy in 2016.

HB 1408: Sunsets January 1, 2019. Rather than sunset tax incentives, HSEA supports a review date to accommodate changes in the market and our clean energy goals. Once a credit reaches sunset, it is very difficult to revive it.

HB 756: Sunsets PV ITC 12-31-2018, utility scale solar 12-31-19, with no sunset for wind. Again, sunset implies the incentive is no longer needed. SHW and PV DG provide instant savings and little grid imposition. HSEA favors a review date.

HB 497: No sunset date. Supports clean energy incentives for Hawaii until the legislature decides they are no longer necessary.

3. Refundable Credit

HSEA strongly supports the continued refundable credit. We estimate that more than half of the current PV installations depend upon the refundable credit. Customers include those who can't afford solar but qualify for a lease, schools that enter into third party PPAs, and commercial and utility scale projects. Restricting or eliminating the refundable credit would severely limit solar installations.

Summary

HSEA supports HB 1408 because it provides a reasonable ramp down for PV and supports a continued incentive for SHW. HB 1408 also caps both residential and utility scale installations, and these caps could serve as an insurance against overpriced or oversized systems for residential systems, and give the state some limits on utility scale incentives. HB 1408 also continues the refundable credit, and directs DoTax to collect and report tax credit data in its annual report to the legislature. HSEA's only concern is the collection of aggregate cap data for utility scale installations. The process of certification may be too onerous a task for DBEDT given its many other duties.

Thank you for the opportunity to testify.

Leslie Cole-Brooks
Executive Director
Hawaii Solar Energy Association

Distributed Energy Partners
Performance in Power

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Tuesday, February 5, 2013 – 10 a.m. – Room 325

Testimony Supporting the Intent of HB 1408 Relating to Renewable Energy

Chair Lee, Vice Chair Thielen, and Members of the Committee:

Distributed Energy Partners is a Hawaii based, owned, and operated firm specializing in the development of commercial-scale distributed renewable energy projects, which include solar, wind, and emerging technologies.

Distributed Energy Partners supports the intent of HB 1408, which will make needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") to reduce the credit's cost to the state. However, we believe that HB 756 is a more effective way to make those same reforms, while also making the RETITC easier to administer and maintaining the viability of all sectors of the solar industry.

First, HB 756 more closely follows the federal tax credit structure. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. This will benefit not only the Department but also all stakeholders, including households, businesses, and contractors, as well as lessors and other funders of solar projects.

Second, HB 756 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Although HB 1408 will preserve the residential market, its per-credit cap for commercial systems and its aggregate cap amounts for utility-scale projects would be devastating to those sectors of the industry. By contrast, HB 756 provides a more balanced approach that makes cuts to—but ultimately preserves—all sectors of the industry. By preserving the viability of all segments of Hawaii's solar industry, HB 756 will lead to a higher level of renewable energy installation at a lower cost to the state. In doing so, it will maximize the use of state tax dollars and keep Hawai'i on the path to achieving its clean energy goals.

RevoluSun therefore recommends that you pass HB 756 to reform the RETITC rather than HB 1408. Thank you for the opportunity to provide this testimony.

Sincerely,

Joshua Powell
Principal & RME

1600 Kapiolani Blvd., Suite 1700, Honolulu, Hawaii 96814

TO: House Committee on Energy and Environmental Protection
Honorable Representative Chris Lee, Chair
Honorable Representative Cynthia Thielen, Vice Chair

RE: Testimony Supporting Intent of HB 1408 Relating To Renewable Energy.

Testimony is 2 pages long.

HEARING: Tuesday, February 5, 10:00 a.m.

Mr. Chairman and members of the Committee:

Kairos Energy Capital supports the intent of HB1408, but urges the Committee to pass out HB756 instead, as a better crafted measure to address all issues facing the Hawai`i tax credit.

Kairos Energy Capital is a Hawai'i merchant bank that focuses entirely on providing and arranging funding for renewable energy projects. We have become one of the leading experts in Hawai'i in solar project financing.

Because our business is about financing renewable energy systems, I will focus my testimony today on the interaction between Hawai`i's renewable energy technology investment tax credit (the "Hawai`i Tax Credit") and the capital markets that make Hawai`i's renewable energy initiatives possible.

1. The Hawai`i Tax Credit Currently Brings $3 of Other People's Money for Every Dollar of State Investment: According to data from the Department of Taxation, DBEDT and county building permit offices, the actual rate at which the Hawai`i Tax Credit is claimed is about 23% of the system value, rather than the "nominal" rate of 35% in the statute. A great deal of this is due to taxpayers claiming the refund at a 30% discount – i.e. 24.5% of the system value – and some amount of unclaimed credits, defective applications and the like. The rest of the money – 77% of the cost of every installation – comes from a combination of Federal money in the form of the Federal tax credit, and private funds.

This "leverage" is very valuable, not only for the State's renewable energy objectives, but also for the capital markets.

2. HB1408 Continues Some of the Least Attractive Features of the Hawai`i Tax Credit: While HB1408 does provide for continued investment by the State in our renewable energy goals, it preserves the "per system" cap structure that has been HB756, on the other hand, adopts the well-tested Federal structure of a simple, and progressively reduced, percentage of cost method.

2. HB1408 Is Highly Adverse to Commercial and Utility Scale Installations: By continuing the "per system" cap and maintaining the commercial/utility cap at

$500,000, HB1408 would codify the worst elements of the Department of Taxation's Temporary Administrative Rule 18-235-12.5-01T et seq. promulgated in November 2012. This rule effectively reduced the residential incentive by 30-50%, and the commercial and utility incentive by 50-95%, with essentially no notice. This rule would remain in effect under HB1408, and the effect would be to cause a great deal of capital to flee the Hawai`i energy market for other, more suitable and stable pastures.

For all of these reasons, while Kairos Energy Capital supports the intent of HB1408, we urge this Committee to pass HB756 instead.

Thank you for the opportunity to submit this testimony, and please feel free to contact me if I can be of further assistance.

Larry Gilbert
Managing Partner
Kairos Energy Capital LLC
55 Merchant Street, Suite 1560
Honolulu, HI 96813
Tel 808 457-1600
Email: LGilbert@kairosenergycapital.com

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Tuesday, February 5, 2013 – 10 a.m. – Room 325

Testimony Supporting the Intent of HB 1408 Relating to Renewable Energy

Chair Lee, Vice Chair Thielen, and Members of the Committee:

RevoluSun is a locally-owned solar company that works in the residential, commercial, and utility-scale sectors of the photovoltaic solar industry in Hawaii.

RevoluSun supports the intent of HB 1408, which will make needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") to reduce the credit's cost to the state. However, we believe that HB 756 is a more effective way to make those same reforms, while also making the RETITC easier to administer and maintaining the viability of all sectors of the solar industry.

First, HB 756 more closely follows the federal tax credit structure. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. This will benefit not only the Department but also all stakeholders, including households, businesses, and contractors, as well as lessors and other funders of solar projects.

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RevoluSun therefore recommends that you pass HB 756 to reform the RETITC rather than HB 1408. Thank you for the opportunity to provide this testimony.

Sincerely,

Colin Yost
Principal & General Counsel

808.748.8888 Office | 808.532.4402 Fax | 1600 Kapiolani Blvd, Suite 1700 Honolulu, HI 96814
RevoluSun.com | Lic. # ABC 30244

SUNPOWER

TESTIMONY IN **Support of the Intent of** HB1408
To: House Committee on Energy and Environmental Protection
Hearing on February 5, 2013 at 10.00 a.m. in Room 325
Aloha Chair Lee, Vice Chair Thielen and members of the Committee:

Introduction: My name is Riley Saito Senior Manager, Hawaii Projects, for SunPower Systems Corporation. SunPower has been a dedicated supporter and active participant of renewable energy initiatives in Hawaii for more than 15 years, in Hawaii. This participation includes: being a Member (charter) of Hawaii Energy Policy Forum; Hawaii Clean Energy Initiative-Steering Committee and Energy Generation Working Group; and participant in various energy related Public Utilities Commission dockets.

SunPower **supports the intent** of HB 1408, which will make needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") to reduce the credit's cost to the State. **However, we believe that HB 756 is a more effective way to make those same reforms, while also making the RETITC easier to administer and maintaining the viability of all sectors of the solar industry**.

First, HB 756 more closely follows the federal tax credit structure. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. This will benefit not only the Department but also all stakeholders, including households, businesses, and contractors, as well as lessors and other funders of solar projects.

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SunPower therefore **recommends that you pass HB 756 to reform the RETITC rather than HB 1408.** Thank you for the opportunity to provide this testimony.

Riley Saito

Riley Saito
Senior Manager, Hawaii Projects
SunPower Systems, Corporation

Sunrun Inc. I 1.855.4SUNRUN I sunrunhome.com

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

TESTIMONY SUPPORTING THE INTENT OF HB 1408

Testimony of Bryan Miller, Vice President, Public Policy & Power Markets, Sunrun

Tuesday, February 5, 2013; House Conference Room 325

Chair Lee, Vice Chair Thielen, and Members of the Committee:

Sunrun **supports the intent** of HB 1408, which will make needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") to reduce the credit's cost to the state. However, we believe that HB 756 is a more effective way to make those same reforms, while also making the RETITC easier to administer and maintaining the viability of all sectors of the solar industry.

First, HB 756 more closely follows the federal tax credit structure. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. This will benefit not only the Department but also all stakeholders, including households, businesses, and contractors, as well as lessors and other funders of solar projects.

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Sunrun therefore recommends that you pass HB 756 to reform the RETITC rather than HB 1408. Thank you for the opportunity to provide this testimony.

Sincerely,

Bryan S. Miller

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE
HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE
HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

HB 1408, RELATING TO RENEWABLE ENERGY TECHNOLOGIES
INVESTMENT TAX CREDIT

February 5, 2013

Chair Lee, Vice-Chair Thielen, 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 purposed of HB 1408 are to: (i) provide tax credit rates and certification requirements for various renewable energy technologies, and (ii) require an annual report from Department of Taxation and a 2017 study from the Department of Business, Economic Development and Tourism.

HREA **supports this measure** for the following reasons:

1) Discussion during Senator Gabbard's Working Group ("GWG"). The discussion (during the four meetings of the GWG during the interim) centered on developing an appropriate and reasonable modification of the RETITC to close loopholes, and reduce the fiscal impact to the state while allowing industry to continue to thrive and grow in order to meet consumer demand and support our clean energy goals.

2) Assessment of this Measure. We believe this measure represents a "good take" on the tax treatments discussed in the GWG. Specifically, we believe lowering of the ITC for residential and small-commercial solar projects to 30% (wind would stay at 20%) per project, and establishing CAPs of $2,500 for residential SHW and $12,500 for residential PV are appropriate and reasonable. However, we are not sure the percentage should be reduced further until we see how the market responds. Similarly, we believe a PTC at 8 cents for utility-scale solar and 1.5 cents/kWh for wind projects is reasonable. Finally, we believe the PTC should be available as a "tax credit" or as a "refundable."

3) Recommendations. We recommend that the committee move this measure forward as the vehicle for continuing the RETITC discussion.

Mahalo for this opportunity to testify.

2/5/2013	**House Committee on Energy & Environmental Protection**	**EEP**
10:00 a.m.		**HB 1408**

TESTIMONY SUPPORTING THE INTENT

Dear Chair Lee, Vice Chair Thielen, and Members of the Committee:

Hawaii PV Coalition **supports the intent** of HB 1408, which will make needed reforms to the Renewable Energy Technologies Income Tax Credit ("RETITC") to reduce the credit's cost to the state. However, we believe that HB 756 is a more effective way to make those same reforms, while also making the RETITC easier to administer and maintaining the viability of all sectors of the solar industry.

First, HB 756 more closely follows the federal tax credit structure. This will remove ambiguities in the existing law and make it easier for the Department of Taxation to administer the credit. This will benefit not only the Department but also all stakeholders, including households, businesses, and contractors, as well as lessors and other funders of solar projects.

Second, HB 756 will maintain the viability of the commercial and utility-scale sectors of the solar industry. Although HB 1408 will preserve the residential market, its per-credit cap for commercial systems and its aggregate cap amounts for utility-scale projects would be devastating to those sectors of the industry. By contrast, HB 756 provides a more balanced approach that makes cuts to—but ultimately preserves—all sectors of the industry. By preserving the viability of all segments of Hawaii's solar industry, HB 756 will lead to a higher level of renewable energy installation at a lower cost to the state. In doing so, it will maximize the use of state tax dollars and keep Hawai'i on the path to achieving its clean energy goals.

Hawaii PV Coalition therefore recommends that you pass HB 756 to reform the RETITC rather than HB 1408. Thank you for the opportunity to provide this testimony.

Mark Duda
President, Hawaii PV Coalition

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

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February 5, 2013 (10:00 AM)

Testimony Before the House Committee on Energy and Environmental Protection
on
H.B. 1408 RELATING TO RENEWABLE ENERGY

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

Good morning and thank you for hearing this and related bills on Hawaii's renewable energy technologies income tax credit (RETITC).

My name is Ron Richmond. I am the manager of business development for Inter-Island Solar Supply, a local wholesale/distributor of solar and related products founded in 1975 with branches on the islands of Oahu, Hawaii and Maui.

Inter-Island Solar Supply supports most of the provisions of HB 1408 but opposes other provisions and is concerned about one provision. A position summary follows:

- Certification of certain credits: **concerned** about administrative complications
- Aggregate cap: **opposed** because it would drastically reduce the number of systems
- Residential solar electric cap increase: **strongly support** because if reflects market reality
- Residential solar electric credit ramp down: **opposed** to retroactive to Jan. 1, 2013
- Residential solar water heating: **strongly support** because it reflects market reality
- Commercial non-utility scale solar credit ramp down: **opposed** to retroactive to Jan. 1, 2013
- Commercial non-utility scale to heat water: **strongly support** tax credit level and cap
- Utility scale solar production credit: **strongly opposed** because this category would receive $8-$14 million in credits over 10 years (see attached Comparison of Non-Utility & Utility Scale PV Credits)
- Exclusion of system related structural costs: **opposed** because such structural costs are directly related to project
- Reduction of depreciation basis by 50%: **opposed** because it adversely affects project investment
- Requires DoTax to collect data: **strongly support** to understand effects of tax credit
- Requires DBEDT to verify, total & compile data: **strongly support** to understand effects of tax credit
- Requires DBEDT to conduct a study in 2017: **strongly support** to understand effects of tax credit
- Effective date: **strongly oppose** retroactive provision

The State has embarked on the ambitious goal of reducing our dependency on fossil fuel generated electricity by 70% by 2030. Hawaii's taxpayers have responded in unprecedented ways to the generous incentives for renewable energy systems. We, as a community, are well on our way to achieve this statutory goal but we have a long way to go.

Reduction of these important incentives to the extent proposed would drastically reduce the momentum we now experience. Hawaii's renewable energy industry has responded to taxpayer demand for solar and wind energy systems by creating jobs, expanding existing businesses, and investing in new businesses. Placing a sunset date on the RETITC would create a chilling effect within our industry. Businesses would no longer be able to conduct long term business planning and would be reluctant to reinvest in their businesses because of the uncertainty created by a sunset date.

The perception of an unsustainable fiscal scenario attributable to the RETITC has been promulgated by the administration. Surprisingly, the administration has focused only on the cost of the tax credit and ignored the benefits. Basic accounting principles require counting both income and expenses to determine the net benefit or costs of an activity. Absent a complete accounting the administration has created a fiscal crisis that simple does not exist as a result of the RETITC. Fortunately, Blue Planet Foundation recognized the importance of a full accounting and commissioned the update of "The Economic and Fiscal Effects of Hawaii's Solar Tax Credit", a peer reviewed rigorous analysis that shows for every dollar the State expends on the credit it receives substantially more than in taxes over the life of the solar system. The attached Figure 1 extracted from the report illustrates the relationship between tax credit level and number of systems installed. A full copy of the report is available upon request.

For the reasons stated, I respectfully requested that this Committee either hold HB 1408 or amend it by eliminating the provisions of concern or opposed.

Thank you for the opportunity to testify on this measure.

Comparison of Non-Utility & Utility Scale PV Credits

at $0.08/kWh

Project Example			
System Size (kW)	1,000	**Peak sun-hrs/day**	5
Installed Cost/kW	$4,000	**Days/yr**	365
Installed Cost	$4,000,000	**Annual Production**	1,825,000 kWh_{DC}
Production Credit	**$0.080**	**Annual Production**	1,460,000 kWh_{AC}[1]
PV Cap	$500,000	**Production Credit Period**	10 yrs

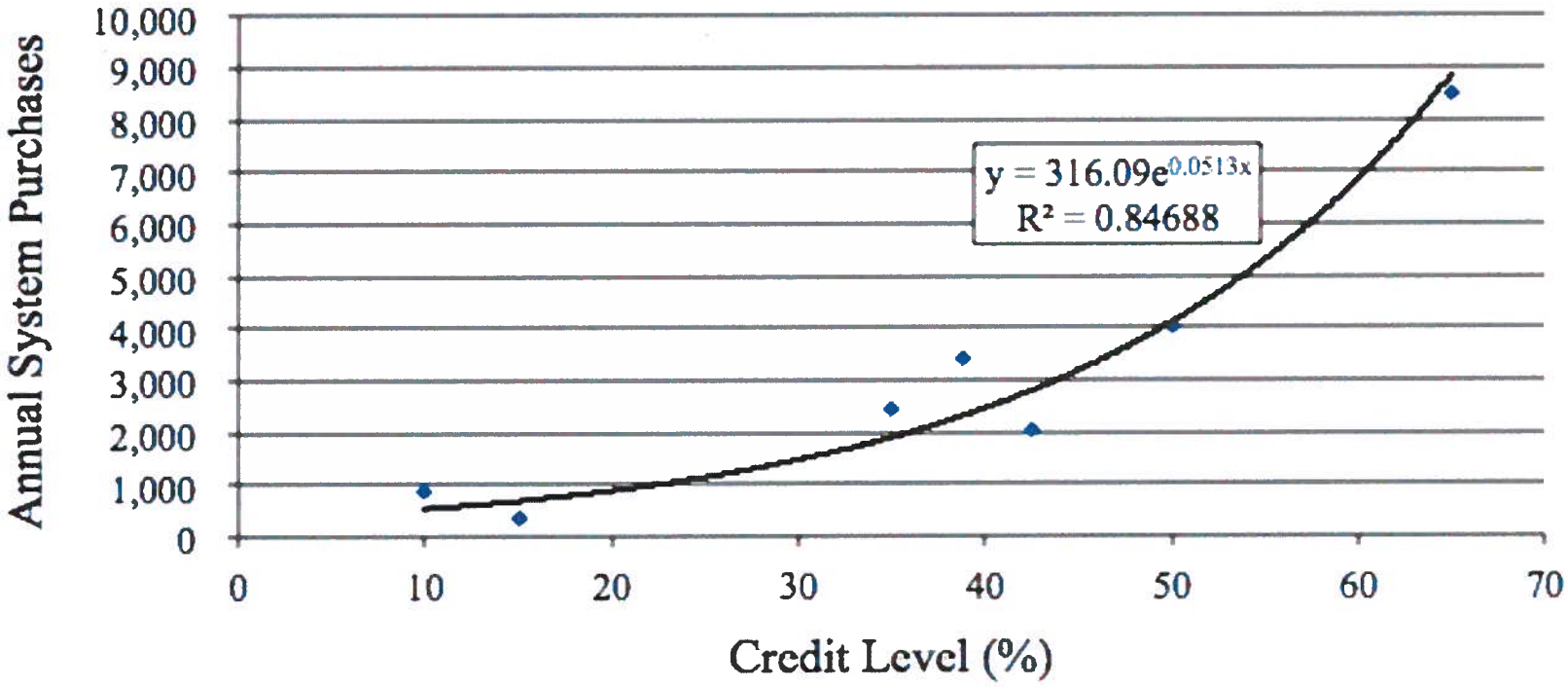
Comparative Analysis

		Non-Utility Scale PV		Utility Scale PV 10 yr. Production Credit (kWhDC)[3]		Utility Scale PV 10 yr. Production Credit (kWhAC)[3]	
Year	**Rate**	**Non-Refundable Amount**	**Refundable Amount**	**Non-Refundable $0.080**	**Refundable $0.056**	**Non-Refundable $0.080**	**Refundable $0.06**
< 2014[2]	35%	$500,000	$350,000	$500,000	$350,000	$500,000	$500,000
	Eff. Rate	13%	8.8%	13%	8.8%	13%	8.8%
2015	30%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	8.8%	36.5%	25.6%	29.2%	20.4%
2016	25%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	8.8%	36.5%	25.6%	29.2%	20.4%
2017	20%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	8.8%	36.5%	25.6%	29.2%	20.4%
2018	20%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	8.8%	36.5%	25.6%	29.2%	20.4%
2019	20%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	8.8%	36.5%	25.6%	29.2%	20.4%
2020	20%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	8.8%	36.5%	25.6%	29.2%	20.4%
2021	20%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	8.8%	36.5%	25.6%	29.2%	20.4%
2022	20%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	8.8%	36.5%	25.6%	29.2%	20.4%
2023	20%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	8.8%	36.5%	25.6%	29.2%	20.4%
2024	20%	$500,000	$350,000	$1,460,000	$1,022,000	$1,168,000	$817,600
	Eff. Rate	13%	12.5%	36.5%	25.6%	29.2%	20.4%
Total		**$500,000**	**$350,000**	**$14,600,000**	**$10,220,000**	**$11,680,000**	**$8,176,000**

Notes

1. Based on an 80% DC to AC derate factor.
2. Assumes utility scale systems installed before 2014 are not eligible for the production credit.
3. Proposed does not specify whether the production credit is based on DC or AC kilowatt-hour produced.

Figure 1. Solar Hot Water Systems Installed as a Function of Total Credit Level



Source: The Economic and Fiscal Effects of Hawai'i's Solar Tax Credit. Figure 1, page 7. Prepared by Thomas A. Loudat, Ph.D. for Blue Planet Foundation. January, 2013

House Committee on Energy & Environmental Protection
Testimony in support to House Bill 1408

Testimony of Alex Tiller, Sunetric CEO
Tuesday, Feb. 5th, 10:00 a.m.

Chair Lee, Vice Chair Thielen, 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 150 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 **supports** House Bill 1408 which calls for a ramp down of tax credits by 2019.

Sunetric supports a gradual ramp down of tax credits, as it allows the industry to plan long term ahead of the anticipated drop.

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

Sincerely,

Alexander Tiller, CEO
Sunetric

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, Certification of renewable energy technology tax credit

BILL NUMBER: HB 1408

INTRODUCED BY: C. Lee

BRIEF SUMMARY: **PART I**: Adds a new section to HRS chapter 235 to require taxpayers claiming a credit for: (1) commercial non-utility scale solar energy property; or (2) non-utility scale wind energy property producing electricity for use in the taxpayer's private residence to apply for certification from the department of business, economic development and tourism (DBEDT). Requires the certification to be approved by DBEDT before the taxpayer can claim the credit under HRS section 235-12.5 provided that no property shall be certified after December 31, 2018.

Delineates certification provisions and requires DBEDT to determine the order in which the credit shall be claimed by qualified taxpayers. Also requires such taxpayers to provide DBEDT with reports from the electric utility demonstrating the number of kilowatt hours produced and sold during a calendar year.

Establishes an aggregate cap of tax credits for commercial non-utility scale solar energy properties for calendar year 2013 at $6 million; 2014 at $9 million; 2015 at $12 million; 2016 and beyond at $13.5 million. If the amount of tax credits exceeds the cap, DBEDT shall notify the department of taxation and the tax credits shall be carried over to the following year.

Establishes an aggregate cap of tax credits for non-utility scale wind energy property for use in the taxpayer's private residence for calendar year 2013 at $2 million; 2014 at $4 million; 2015 at $6 million; 2016 and beyond at $10 million. If the amount of tax credits exceeds the cap, DBEDT shall notify the department of taxation and the tax credits shall be carried over to the following year.

DBEDT and the department of taxation may adopt rules to determine eligibility of qualified taxpayers; and clarify and streamline the determination process under which taxpayers may claim tax credits in accordance with the aggregate caps.

Amends HRS section 235-12.5 to provide that an income tax credit may be claimed for a solar energy property that produces electricity for residential usage (not including the heating of water) in the amount of: (1) 30% of the basis of solar energy property installed and placed in tax year 2013; (2) 25% for tax year 2014; or 20% on or after January 1, 2015 up to a maximum of $12,500.

For solar energy property that produces water heating for residential use, the credit shall be 35% of the basis of the solar energy property, up to a maximum of $2,500.

For commercial non-utility scale solar energy property, the credit shall be 30% of the basis of the commercial non-utility scale solar energy property placed in service for tax year 2013; 25% for the tax year 2014; or 20% for those installed on or after January 1, 2015, up to a maximum of $500,000.

For commercial non-utility scale solar energy property that heats water, the credit shall be 35% of the basis of the commercial non-utility scale solar energy property, up to$250,000.

For utility scale solar energy property installed and placed into service after December 31, 2012, 8 cents per kilowatt hour produced during the utility scale solar energy property's first 180 months of operation.

For non-utility scale wind energy property that produces electricity for use in the primary residence of the taxpayer, the credit shall be 20% of the basis of the wind energy property.

For other non-utility scale wind energy property that produces electricity, the credit shall be 20% of the basis of the wind energy property.

For utility scale wind energy property installed and placed into service after December 31, 2012, the credit shall be 15 cents per kilowatt hour produced and sold to a public utility during the utility scale wind energy property's first 120 months of operation.

Defines "basis" as the cost of installing and placing an energy property in service, including the cost of any accessories, excluding: (1) premiums unrelated to the operation of energy property; (2) premiums offered with the sale of energy property; and (3) costs incurred for the repair, construction, or reconstruction of buildings or structures associated with the installation or placing in service of energy property. Defines "commercial non-utility scale" as energy produced for a business that does not include leased or rented residences where the producing entity is not connected to a utility grid at sub-transmission or transmission voltage. Defines "utility scale" as solar or wind energy property that is: (1) designed, installed, and placed into service to produce electricity; (2) interconnected to a utility grid at sub-transmission or transmission voltage; and (3) subject to a feed-in tariff or power purchase agreement approved by the public utilities commission.

Requires DBEDT to: (1) verify the number of kilowatt hours produced and sold by each taxpayer during each calendar year; (2) total all tax credits that the department certifies; and (3) compile the total amount of tax credits for each taxable year and the cumulative amount of the tax credits during the credit period.

The provisions in this section shall be applicable to eligible properties installed and placed in service after December 31, 2012 and before January 1, 2019. This section shall be applicable to tax years beginning after December 31, 2012.

PART II: Provides that independent power producers not currently regulated by the public utilities commission that have submitted an agreement with an electric utility company for approval by the public utilities commission by March 31, 2013, shall be allowed tax credits as authorized in the 2012 calendar year for energy properties placed into service after December 31, 2012, as part of the agreement.

PART III: Requires DBEDT to conduct a study in the 2017 calendar year to determine: (1) the extent to which renewable energy technologies income tax credits have benefitted the state by advancing the

state's renewable energy goals, reducing energy costs for homeowners and business owners, and generating economic growth; (2) the net cost to the state of the renewable energy technologies income tax credits; (3) the extent to which the state will be able to achieve its renewable energy goals without further modification to the existing renewable energy technologies income tax credit; and (4) whether the renewable energy technologies income tax credit should be extended, eliminated, or otherwise revised for tax years beginning January 1, 2020. Directs DBEDT to submit a report to the 2018 legislature.

EFFECTIVE DATE: Upon approval as noted

STAFF COMMENTS: While it appears that this measure is proposed to reduce the outflow of tax credits due to the misinterpretation of the existing tax credit provisions, it is questionable why the proposed measure expands the renewable energy technologies income tax credits to include utility scale solar energy facilities and allows independent power producers to claim the tax credits.

This measure also proposes caps and adjusts the amounts of the credit for the various renewable energy technologies, as drafted, while the intent of the measure is to clarify the application of the renewable energy technologies income tax credits; it is questionable whether the adoption of this measure will achieve that goal. Unclear is the application of the caps in the aggregate and allowing another department to have the final say on whether or not the devices are qualified to be awarded the credits. Awarding of any tax incentive should be left to the tax department while another department, in this case DBEDT, may advise on whether or not the device meets the technical definitions of a qualified unit. As an alternative, greater clarity regarding the regulation of the allowable renewable energy technology tax credits may be made through rules administered by the department of taxation.

Instead of providing tax incentives via tax credits 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.

While this and other measures demand serious consideration in order to stem the abuse of the current tax credit provisions, lawmakers and staff need to spend time during the interim researching and honing the tax incentive to be a more reasonable incentive that is forged in a good understanding of the developing technology. What is currently on the books reflects a technology long deemed archaic and, therefore, the tax incentive is less than efficient. Instead of setting off in its own direction, lawmakers may want to adopt the federal definitions of alternate energy devices which qualify for preferential treatment rather than attempting to make up rules and definitions that would be unique to Hawaii. At least administrators could look to the federal standards for these devices for guidance.

Digested 2/4/13