

HB 1520,

HD2

**TESTIMONY OF HERMINA M. MORITA
CHAIR, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
MARCH 22, 2011**

MEASURE: H.B. No. 1520 HD2
TITLE: Relating to Renewable Energy.

Chair Gabbard and Members of the Committee:

DESCRIPTION:

This bill exempts third-party customer-generated renewable energy systems from the definition of public utility. This bill also requires the Public Utilities Commission ("Commission") to monitor the impact of net-energy metering on existing electric utility ratepayers.

The proposed SD1 directs the Commission to adopt rules to allow public utility customers to finance purchases of energy-saving appliances and renewable energy technology through on-bill financing, backed by the public benefits fund.

POSITION:

The Commission does not object to H.B. No.1520 HD2.

The Commission opposes the proposed SD1, as Commission has concerns with this draft, which the Committee should be aware of before proceeding any further with this proposal, primarily with the administrative costs that would be involved in on-bill financing for various types of energy saving appliances and technologies.

COMMENTS:

Under the current definition of "public utility" in Section 269-1, HRS, it could be argued that the innovative business models of companies such as SunRun place them within the definition of a public utility. While the Commission may not find such an argument persuasive, it may be best to clarify the law, as reflected in H.B. No. 1520 HD2, so that companies using these business models can continue to help more Hawaii consumers benefit from solar energy systems on their properties.

With regard to the proposed SD1, the Commission is concerned with the considerable amount of cost that the public benefits fee will likely have to support to implement the contemplated programs. Either the per kilowatt/hour public benefits fee surcharge to utility customers will need to be raised or these "on-bill" financing programs will have to be implemented at the expense of other energy efficiency programs such as the Residential Efficient Water Heating Program, and the Commercial and Industrial Customized Rebate Program, among others, that are currently being funded in part with the public benefits fee.

It does not appear that any review or analysis of the costs and effectiveness of the proposed "on-bill" financing programs has been undertaken to support the proposed programs as the bill does not provide for a cost study to examine what the impacts will be on the public benefits fee to implement an on-bill financing program or the program's cost-effectiveness in encouraging or facilitating the implementation of energy efficiency measures and renewable energy generation. It may be in the State's and electricity customers' best interest to research and understand the cost and effectiveness of the proposed programs before requiring their implementation.

The Commission prefers the language from SB 182 SD1 which would require the Commission to conduct a cost-benefit analyses and study to determine if the implementation of such a program is in the public's best interest.

Thank you for the opportunity to testify.

**TESTIMONY OF H. RAY STARLING
PROGRAM MANAGER FOR THE
HAWAII PUBLIC BENEFITS FEE ADMINISTRATOR
TO THE
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
MARCH 22, 2011**

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The proposed SD1 directs the Public Utilities Commission ("Commission") to adopt rules to allow public utility customers to finance purchases of energy-saving appliances and renewable energy technology through on-bill financing, backed by the public benefits fund.

POSITION:

The Public Benefits Fee Administrator (PBFA) independently concurs with and supports the position of Hermina M. Morita, Chair of the Hawaii Public Utilities Commission taken in testimony presented to this Committee today regarding proposed SD1 to HB 1520 HD2.

More particularly, the PBFA does not object to HB 1520 HD2.

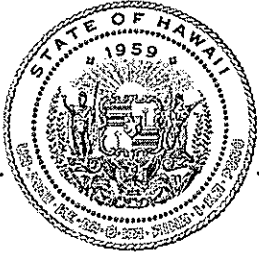
However, with respect to the on-bill financing mandate proposed in SD1, the PBFA is greatly concerned about the administrative costs and total burden that would be imposed on the PBFA program and the allocation of available program funds by such a mandate.

COMMENTS:

1. Previous HECO Solar Saver Experience - The intent behind the proposed SD1 is laudable. However, independent assessment reports of the previous HECO Companies' on-bill financing pilot program (Solar Saver Program) carried out during 2008-2009 reveal that:
 - a. **High Operational Costs and Complicated Administration** - Considerable operational cost and manpower were expended in administering the complex, long-term and dynamic financial relationships required by the pilot program. The attachment of equipment to property deeds brings additional complexity.

- b. **Targeted Renter-Landlord Market Not Reached** - Less than 2% of the pilot participants were part of the targeted renter-landlord market. Families that had other financing options available chose the on-bill program because it was better than other private financing offers available to them. Most of the pilot participants were single-family home owners primarily interested in taking advantage of a good deal.
 - c. **Long Term Costs and Administration** - The pilot program anticipated that more administrative issues and costs would arise over time as system repairs were needed, loan payments were missed and property ownership changed.
- 2. Study and Analysis Needed Before Committing - Before embarking on the mandate of SD1, the PBFA would suggest that a study be conducted to determine how the experience of on-bill financing programs in other states compares to the experience of the HECO Companies' Solar Saver Program pilot. The study should also include an analysis of the most cost-effective use of the limited funds available for the PBFA Program to promote energy conservation and efficiency. Armed with this information, policy-makers can make a more informed decision as to where best to commit limited energy funds.
- 3. Limited PBFA Funds Available – The total PBFA budget for 2011-2012 is \$33M of which approximately \$23M will go directly to the customers in the form of incentive/rebates. If the entire incentive/rebate budget were devoted to financing the mandate of SD1, we would only be able install approximately 3,300 solar water heaters and nothing else for the entire year. And we would only achieve 0.16% of the HCEI goal of the annual 4,300 GWH savings by 2030. Funding SDI mandates with the PBFA budget would reduce or eliminate funding for other more cost-effective measures.
- 4. Clarification Needed on Funding Source - Finally, it is not clear from the language in SD1 whether or not the intent is to have the Public Benefits Fee supply the actual financing for the devices and systems covered or if third-party financing is to be used. This should be clarified to allow the actual financing funds to come from sources other than the PBFA funds, if possible. Clarification is also needed as to the intent of leveraging Federal and State tax credits within the proposed program.

Respectfully submitted.



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

NEIL ABERCROMBIE
GOVERNOR

RICHARD C.LIM
DIRECTOR

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Statement of
RICHARD C. LIM
Director

Department of Business, Economic Development, and Tourism
before the

**SENATE COMMITTEE ON
ENERGY AND ENVIRONMENT**

Tuesday, March 22, 2011
2:45 p.m.

State Capitol, Conference Room 225

in consideration of

**HB1520 HD2, SD1 Proposed
RELATING TO ENERGY**

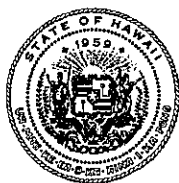
Chair Gabbard, Vice Chair English and members of the committee.

The Department of Business, Economic Development, and Tourism offers comments on HB1520 HD2, SD1 Proposed, which directs the Public Utilities Commission to implement an on-bill financing program for residential electric utility consumers to finance purchase of energy efficient or renewable energy devices and systems through their regular utility bills.

While we recognize that on-bill financing represents a number of administrative challenges, we also recognize the benefits to ratepayers in terms of increased energy efficiency and the use of renewable energy to reduce our dependence on imported fossil fuels. On-bill financing represents an alternative for those who cannot afford the burden of significant upfront costs for these items. Water heating represents a very large portion of a resident's monthly energy use; refrigerators also can be a sizeable energy user for a household. However, this bill

could have unintended consequences on the electricity rates that ultimately impacts all rate payers, including the consumers that this bill is targeted to help.

Thank you for the opportunity to provide this testimony.



NEIL ABERCROMBIE
GOVERNOR

BRIAN SCHATZ
LT. GOVERNOR

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KEALI'I S. LOPEZ
DIRECTOR

EVERETT KANESHIGE
DEPUTY DIRECTOR

TO THE SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

THE TWENTY-SIXTH LEGISLATURE
REGULAR SESSION OF 2011

TUESDAY, MARCH 22, 2011
2:45 P.M.

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

HOUSE BILL NO. 1520, HD2, PROPOSED SD1
- RELATING TO RENEWABLE ENERGY

DESCRIPTION:

This measure directs the Public Utilities Commission ("PUC") to implement an on-bill financing program for residential electricity consumers to finance purchases of energy efficient or renewable energy devices and systems through their electricity bills.

POSITION:

The Division of Consumer Advocacy ("Consumer Advocate") supports this measure.

COMMENTS:

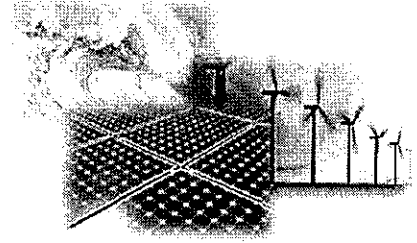
This measure seeks to address the up-front financing costs that currently present a barrier to the adoption or installation of renewable energy systems or energy-saving alternatives that could help to reduce the State's reliance on fossil fuels.

The Consumer Advocate agrees that the expense of replacing an older energy-inefficient refrigerator with a newer ENERGY STAR model or installing a photovoltaic system may, at times, prevent an electric utility customer from taking

actions that could benefit the utility system and members of the general public. The Consumer Advocate also notes that the idea of offering financing capital intensive projects, such as a solar water heater, has already been implemented. While these financing pilot programs did not achieve the level of success that might have been expected, it might be useful to investigate a similar program for appliances. Some of the experiences associated with these past pilot programs should be useful in resolving the questions and problems that occurred with those other programs, such as the potential impact on other ratepayers and how the program should reflect that some customers may be renters and may not be at that electric account address long enough to pay back the entire bill. It should be also noted that the past program was able to be implemented without the Commission promulgating rules, and the Consumer Advocate suggests that if this measure moves forward, the need for rules may not be present. Requiring rules to be developed will be time consuming and may hinder the implementation of the proposed program.

The Consumer Advocate applauds the Legislature for its creativity in finding ways to help consumers adopt energy-saving behaviors that would allow the State's electric utilities to meet their obligations under Hawaii's Energy Efficiency and Renewable Portfolio Standards mandates. Removing the barriers to the adoption or installation of renewable energy systems or energy-saving alternatives will place the State on a path to meeting its goals expressed in the Hawaii Clean Energy Agreement.

Thank you for this opportunity to testify.



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

March 22, 2011, 2:45 P.M.

Room 225

(Testimony is 5 pages long)

TESTIMONY IN STRONG SUPPORT OF HB 1520 HD2 SD1

Chair Gabbard and members of the Committee:

The Blue Planet Foundation strongly supports the proposed Senate Draft 1 of HB 1520 HD2, directing the Public Utilities Commission to establish an on-bill financing program for residential electricity customers. We greatly appreciate the Chair's willingness to consider this critical clean energy, pro-consumer measure this session.

On-bill financing is one of the most powerful tools to increase adoption of energy efficiency and solar. On-bill financing overcomes the biggest hurdle to energy efficiency: the up-front cost. By eliminating the initial cost and enabling residents to pay off the investment directly from the energy savings over time, adoption of efficiency and clean energy will accelerate. Consider:

- U.S. Department of Energy's Bill Parks, who helped draft the Hawaii Clean Energy Initiative, Parks specifically mentioned on-bill financing as an efficiency program that "will be critical to realize goals."
- The National Small Business Association's report, *On-Bill Financing: Helping Small Business Reduce Emissions and Energy Use While Improving Profitability*, endorses on-bill financing as an "unparalleled success." According to the report, energy-efficiency programs such as on-bill financing can help Hawaii businesses save more than \$11,000 every year on their energy bills. The NSBA President Todd McCracken says of on-bill financing: "Quite simply, small businesses can increase their profitability while reducing their carbon footprint."

Jeff Mikulina, executive director • jeff@blueplanetfoundation.org

55 Merchant Street 17th Floor • Honolulu, Hawaii 96813 • 808-954-6142 • blueplanetfoundation.org

On-bill financing is one of the most powerful tools to overcome what's known as the "energy efficiency paradox" among consumer behavior researchers. An abundance of literature^{1,2} demonstrates that consumers are highly myopic in their purchasing decisions when it comes to energy saving technologies. Despite the environmental and long-term economic advantages of converting to photovoltaic power, a miniscule percentage of Hawai'i homes take advantage of this technology. Even less expensive purchases, like high efficiency refrigerators, are passed over because of their initial cost. By eliminating the up-front cost and enabling residents to pay for the investment through the energy savings over time, adoption of efficiency and clean energy will accelerate.

Blue Planet believes that Hawaii's public utilities have the capacity to establish an on-bill financing program for residential customers statewide. In fact, a recently proposed "community benefits package" for Lana'i residents in conjunction with the proposed wind farm contains a provision to provide an on-bill financing program to Lana'i residents for solar water heaters.

Blue Planet respectfully asks that these committees forward HB 1520 to help lower the cost of living to residents statewide while helping Hawai'i achieve its clean energy goals.

What following pages of this testimony attempt to answer some of the frequently asked questions about on-bill financing.

Thank you for the opportunity to testify.

Frequently Asked Questions about On-Bill Financing

What is on-bill financing?

On-bill financing is a program designed to enable customers to pay for energy efficiency upgrades and solar through energy savings. Senate Bill 182 directs the public utilities commission (PUC) to develop the specifics of the program.

How does it work?

A low-interest loan is extended to a residential customer who is interested in making energy-efficient upgrades or installing solar. Such improvements will result in reduced energy

¹ Sanstad, A. H., Blumstein, C., & Stoft, S. (1995). Viewpoint: How high are option values in energy-efficiency investments? *Energy Policy*, 23, 739-743.

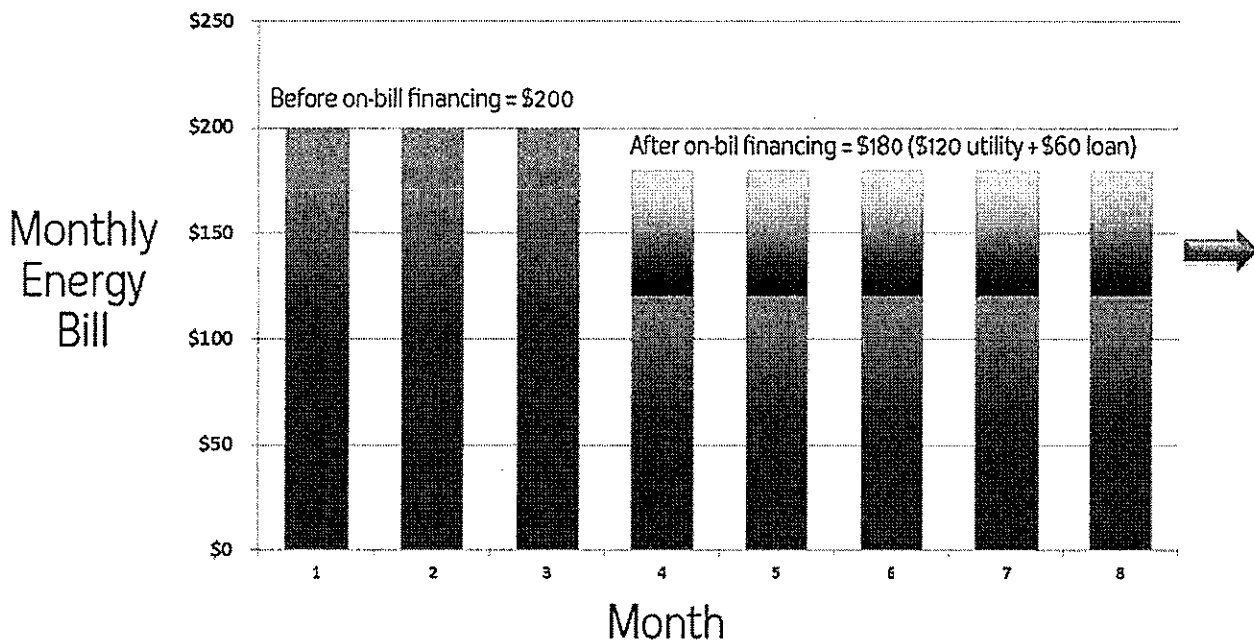
² Meier, A., and Whittier, J. (1983). Consumer Discount Rates Implied by Purchases of Energy-Efficient Refrigerators. *International Journal of Energy*, 8(12), 957-962.

consumption, and therefore, lower energy costs. A portion of the monthly savings is applied to repaying the loan, which will appear on the customer's bill as a financing charge.

What are the benefits of on-bill financing?

- Convenience: embedding the financing within an existing energy bill streamlines the process for the residential customer. Customers don't have to sort through various bank loans to structure their own financing.
- Immediate savings: On-bill financing programs are structured to allow the customer to choose a term length that will result in immediate overall savings on their energy bill—even as they pay off the investment.
- Low default rate: Because the financing is tied to the existing electricity bill, the default rate is low (typically less than 1%).

Simplified example of on-bill financing for a residential solar water heater



What clean energy investments can be financed?

Under SB 182, residential investments in solar water heating, photovoltaic, and ENERGY STAR® refrigerators can be financed, with inclusion of other energy efficiency or clean energy technologies to be determined by the PUC.

Who pays?

Partnering financial institutions can authorize the loans, setting individual terms and interest rates based on the customer's investment.

Who administers the program?

The public benefits fund administrator could manage the program or another contractor could be selected—either with PUC oversight.

Can on-bill financing benefit renters?

On-bill financing would help to address one of the biggest challenges to energy efficiency adoption: the landlord-tenant problem. Landlords are often not inclined to invest in energy efficiency upgrades or solar if they are not paying the utility bill; tenants are not interested in investing if they are unsure how long they will stay at the location. On-bill financing allows the investment to be made with no upfront cost to the landlord or the tenant—and the tenant enjoys a lower cost of energy while the landlord benefits from the additional value. If the renter moves, the charge remains tied to the meter, not the customer, and the new tenant assumes the bill. This encourages renters to participate because they pay for energy efficiency solutions only while they benefit from them.

Why is on-bill financing effective?

- It removes the barrier of high up-front costs.
- It reduces the hassle of adopting energy efficiency solutions for customers.
- The debt remains tied to the property, so if an owner sells or a renter moves out, the new tenant retains the energy savings as well as the remaining payments.

What other states have implemented on-bill financing?

Among the states that have implemented on-bill financing are Connecticut, Illinois, Massachusetts, Rhode Island, California, Michigan, New Hampshire, New York, New Jersey and Kansas.

Who benefits?

- Homeowners benefit by immediately lowering the total cost of home ownership.
- Renters benefit by having a no-cost option to reduce their utility bills (without burdening the landlord).
- The state benefits by accelerating the rate of achieving the HCEI goals of 30% energy efficiency and 40% renewable energy by 2030.
- The economy benefits from having steady growth in high-tech clean energy and efficiency jobs.
- The environment benefits from a reduction in greenhouse gas pollution.

On-bill financing case studies

- **Midwest Energy** is a customer-owned energy cooperative based in rural Kansas. Available to Midwest Energy's 88,000 electric and/or gas customers, the How\$mart program enables consumers to pay for investments in energy-efficiency, including insulation, sealing, and heating and cooling systems, through a charge on their utility bill. Both homeowners and renters (with landlord permission) may participate in the program. The program was initially offered as a four-county pilot, and opened to all Midwest Energy customers in the summer of 2008. As of June 2010, some 400 customers had enrolled in the program.
- In 2000, **United Illuminating Company**, serving 300,000 customers in Connecticut, launched its Small Business Energy Advantage program. From 2000 to 2007, the program supported more than 2,450 projects. At a total cost of approximately \$28 million, the utility estimates that these projects will save 670 million kWh over their lifetimes. In 2007 alone, the program resulted in a peak load reduction of approximately 2 MW. With one of the longest running on-bill finance programs in the country, UI has done audits in close to 5,500 small-business customer locations—approximately one-third of the total market—with 3,400 project installations. UI expects to complete 600 installations in 2009. Default rates have been less than one percent, and have typically been on the order of one to three defaults per year.
- **Sempra Energy Utilities** has, since 2007, operated an on-bill loan program for small businesses. Typical loan amounts to electric customers are approximately \$20,500. Loan volume has been increasing steadily since the program's inception in December 2007. As of late summer 2009, the company had \$3.5 million loans outstanding, with approximately the same amount at some point within the loan approval process. Default rates have been very low, with only two defaults from the total portfolio of more than 350 loans made. The state of California's public benefit fund covers any potential losses.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

March 22, 2011
2:45PM

SENATE
COMMITTEE ON ENERGY AND ENVIRONMENT
HB1520 HD2 – PROPOSED SD1

Christy Imata

TESTIMONY IN SUPPORT

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

The Hawaii Solar Energy Association supports the proposed SD1 of HB 1520 HD2, which would direct the Public Utilities Commission to implement an on-bill financing program for residential electric utility consumers to finance purchases of energy efficient or renewable energy devices and systems.

An on-bill financing program for residential electric utility customers would not only help to target a portion of the market who cannot afford the up-front cost of energy efficient or renewable energy devices and systems, but would also help move the needle to increase the penetration of these clean energy technologies on renter-occupied single family homes.

Specifically in the case of solar water heating, this is a technology that has now been in Hawaii for over 3 decades. And as would be expected given Hawaii's abundant solar resource and favorable solar incentives, Hawaii leads the nation in terms of per housing unit penetration as well as in the absolute number of solar water heating systems installed. Yet, when you look at the actual penetration level on residential single-family detached homes, it remains roughly at 30%. This low penetration level can be attributed to many factors, including resistance to aesthetics, not knowing about or understanding the benefits of solar water heating, the inability to finance the up-front cost of this technology, and the existence of a significant renter-occupied housing market in the state. However, taking into account the existence of state tax incentives and a rate-payer funded rebate, it seems most likely that the root of this low penetration level is the lack of sufficient public policies which make it worthwhile for landlords to invest in this clean energy technology.

The proposed SD1 of HB1520 HD2 would help to address this mismatch of benefits for investing in renewable energy or energy efficient devices or systems between renters and landlords, and is key to helping Hawaii achieve its clean energy goals.

Thank you for the opportunity to testify on this measure.

Christy Imata
Hawaii Solar Energy Association

About Hawaii Solar Energy Association

Hawaii Solar Energy Association (HSEA) is comprised of installers, distributors, manufacturers and financiers of solar energy systems, both hot water and PV, most of which are Hawaii based,

owned and operated. Our primary goals are: (1) to further solar energy and related arts, sciences and technologies with concern for the ecologic, social and economic fabric of the area; (2) to encourage the widespread utilization of solar equipment as a means of lowering the cost of energy to the American public, to help stabilize our economy, to develop independence from fossil fuel and thereby reduce carbon emissions that contribute to climate change; (3) to establish, foster and advance the usefulness of the members, and their various products and services related to the economic applications of the conversion of solar energy for various useful purposes; and (4) to cooperate in, and contribute toward, the enhancement of widespread understanding of the various applications of solar energy conversion in order to increase their usefulness to society.



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March 22, 2011

The Honorable Mike Gabbard, Chair
Senate Committee on Energy and Environment
State Capitol, Room 225
Honolulu, Hawaii 96813

RE: H.B. 1520, H.D. 2, Proposed S.D. 1, Relating to Renewable Energy

HEARING: Tuesday, March 22, 2011 at 2:45 p.m.

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

I am Myoung Oh, Government Affairs Director, here to testify on behalf of the Hawaii Association of REALTORS® ("HAR"), the voice of real estate and its 8,500 members in Hawaii. HAR expresses concerns on H.B. 1520, H.D. 2, Proposed S.D. 1, which directs the Public Utilities Commission to implement an on-bill financing program for residential electric utility consumers to finance purchases of energy efficient or renewable energy devices and systems through their regular electric utility bills.

HAR believes in the concept of green practices and energy efficiency and savings. However, HAR is concerned over measures that would pass onto future property owners the responsibility for repaying voluntary energy savings products installed by current owners using the public benefits fee, as well as permitting rental tenants to be considered eligible customers. As such, HAR recommends that the measure be amended to address the following issues:

- (1) Rental tenants or other third-parties should not be eligible without the property owner's authorization as this may lead to unforeseen financial consequences for the owner. Therefore the definition of residential electric utility customer should be changed to clarify this.
- (2) Financial obligations related to on-bill financing should be borne by the owner of real property who implemented the improvements if it is done with state funds such as the public benefits fee. HAR believes that upon transfer of the property, the originating owner's participation in the on-bill financing should be terminated and all amounts due under the program shall be paid in full. The transfer of clear title is important and any undue delays, such as having to remove energy-efficient devices because of unfinished payments, will create a burden for parties involved in the real property purchase process.
- (3) Lastly, HAR notes that on-bill financing is a loan and should provide participating owners with clear and accurate amortization schedules, interest rates, origination fees, and/or credit terms and conditions.





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For the foregoing reasons, we respectfully request that this bill be amended to address these important issues.

Mahalo for the opportunity to testify.

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HAWAII RENEWABLE ENERGY ALLIANCE

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John Crouch
SPSI, LLC

Herbert M. (Monty) Richards
Kahua Ranch Ltd.

TESTIMONY OF WARREN BOLLMEIER ON BEHALF OF THE HAWAII RENEWABLE ENERGY ALLIANCE BEFORE THE SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

HB 1520 HD1 PROPOSED SD1, RELATING TO RENEWABLE ENERGY

March 22, 2011

Chair Gabbard and Vice-Chair English 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 purpose of HB 1520 HD1 Proposed SD1 is to direct the public utilities commission to implement an on-bill financing program for residential electric utility consumers to finance purchases of energy efficient or renewable energy devices and systems through their regular electric utility bills. HREA **supports the intent of this measure** and provides the following comments for consideration:

1. Existing On-Bill Financing Programs. The Hawaiian Electric Company ("HECO") has completed a two-year Solar Saver Program Pilot Program ("SSP") for solar hot water systems. The Pilot Program, based on the PAYS® ("Pay As You Save") concept, SSP has been a success, and should be expanded with modifications.
2. Potential for Application to Energy Efficiency. The ingenious PAYS® concept, created by Harlan Lachman and Paul Ciello of the Energy Efficiency Institute in Coldwater, Vermont, was initially applied to and has been successful with energy efficiency technologies. Thus, we support their inclusion in this measure.
3. What about other Renewable Technology Options. While other renewable technologies can be more expensive than energy efficiency and solar hot water, we support their inclusion as potential on-bill financing options. For example, there could be a combination of other incentives (such as tax credits and grants) that could help buy down the initial costs, and thereby keep the payment period to an acceptable number of years. We also note under the PAYS®:
 - a. the payments are "tied" to the "meter" or "utility account," such that the payments can be transferred from one homeowner to another.
 - b. Renters can participate with agreement of their landlords.
 - c. Ideally, funds for could be acquired (in bulk) by the PBFA, and would therefore not be a burden to non-participating ratepayers, as was the case in the SSP.

Therefore, we recommend the Commission examine the PAYS® can be expanded and improved, and compared with other on-line financing approaches. However, this is **NOT Rocket Science**, it is actually, in our opinion **more of a challenge**. Why is that? Once a rocket is designed and tested, we have shown that the technology can work repeatedly and reliably. PAYS® or other on-bill financing options are more of a challenge due to the human engineering required.

Thank you for this opportunity to testify.

**Testimony Before the Senate Committee
On
Energy and Environment**

March 22, 2011 (2:45 pm)

H.B. 1520 HD2 Proposed SD1 RELATING TO RENEWABLE ENERGY

**By: Alan Hee
Energy Solutions Department
Hawaiian Electric Company, Inc.**

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

My name is Alan Hee, and I represent Hawaiian Electric Company (HECO) and its subsidiary utilities, Hawaii Electric Light Company (HELCO) and Maui Electric Company (MECO). I appreciate the opportunity to present testimony on H.B. 1520, HD2, proposed SD1.

The proposed SD 1 for H.B. 1520 HD2 directs the Public Utilities Commission (Commission) to implement an on-bill financing program for residential electric utility customers to finance the purchase of energy efficient measures. Hawaiian Electric supports the intent of the bill to further the adoption of these measures. Hawaiian Electric and its subsidiaries have had some recent experience with on-bill financing programs and have the following recommendations if an on-bill financing program is implemented.

In June 2006, the Legislature enacted Act 240, which required the Commission to implement a pilot project that allows customers to purchase solar water heating systems with no up-front costs and enables the customers to pay for the systems over time on the customers' electric bill. Similar to this proposed SD 1 of HB 1520, under Act 240, if the customer vacates the property, the subsequent tenants of the home become responsible to continue the repayments. Per the direction of the Commission, Hawaiian Electric and its subsidiaries implemented the SolarSaver Pilot Program in July 2007 and installed over 500 solar water heating systems under this program through December 2010.

The administrative requirements of an on-bill financing program must be streamlined if the program is to be cost-effective

A subsequent evaluation of the pilot program conducted by an independent third-party indicated that the SolarSaver Pilot Program was complicated to administer as it required close coordination with independent solar contractors, notaries, the State Bureau of Conveyances, and the Hawaiian Electric Companies. The evaluation of this program also indicated that it was not likely that the SolarSaver Pilot Program was cost-effective given the high administrative burden, the costs of which are passed on to utility ratepayers. Thus, it is the nature of these types of on-bill financing programs to be very expensive.

Permit utilities to require full repayment upon account closure

The proposed bill seeks to further increase the complexity of the program by substantially increasing the number and types of measures that would be covered by on-bill financing. While solar water heating systems are left behind for the next tenant when occupants vacate the home, appliances, such as refrigerators, can be easily removed and transported. Despite the bill's language that such removal is only allowed with agreement of all parties, the utility could be left with trying to recover repayments from the next tenant who doesn't have possession of the appliance.

Thus, under certain conditions the bill should permit the utilities to require full repayment of the appliance upon account closure.

Permit utilities to recover all reasonable costs

Since the costs to administer on-bill financing are high due to the need for the utilities to administer these loans and repayments for a long period of time after their installation, the utilities request that language be added into the proposed bill that provides them the ability to recover all of their reasonable costs. Language similar to the following was included in Act 240 (2006):

“The commission shall ensure that all reasonable costs incurred by electric utilities to start up and implement on-bill financing are recovered as part of the utility's revenue requirement, including necessary billing system improvements and any costs for measures purchased by customers using on-bill financing that are not recovered via participating residential consumers' on-bill financing bill payments or otherwise.”

Allow the Commission to determine expenditure levels

Finally, the HECO Companies propose that the Commission rather than the Public Benefits Fund Administrator (PBFA) determine what would be a reasonable percentage of the collected public benefits fee that would be spent on the on-bill financing program. Traditionally, it has been the Commission who approves and reviews utility and PBFA demand side management program expenditures.

Thank you for this opportunity to testify on this proposed bill.

Testimony for ENE 3/22/2011 2:45:00 PM HB1520

Conference room: 225
Testifier position: support
Testifier will be present: No
Submitted by: Douglas A. Codiga
Organization: Individual
Submitted on: 3/21/2011

Comments:

Chair Gabbard and members of the Committee:

I strongly support the proposed Senate Draft 1 of HB 1520 HD2, directing the Public Utilities Commission to establish an on-bill financing program for residential electricity customers.

On-bill financing is a powerful tool to increase adoption of energy efficiency and solar. On-bill financing overcomes the biggest hurdle to energy efficiency: the up-front cost. By eliminating the initial cost and enabling residents to pay off the investment directly from the energy savings over time, adoption of efficiency and clean energy will accelerate.

On-bill financing is one of the most powerful tools to overcome what's known as the "energy efficiency paradox" among consumer behavior researchers. An abundance of literature demonstrates that consumers are highly myopic in their purchasing decisions when it comes to energy saving technologies. Despite the environmental and long-term economic advantages of converting to photovoltaic power, a miniscule percentage of Hawai'i homes take advantage of this technology. Even less expensive purchases, like high efficiency refrigerators, are passed over because of their initial cost. By eliminating the up-front cost and enabling residents to pay for the investment through the energy savings over time, adoption of efficiency and clean energy will accelerate.

Hawaii's public utilities have the capacity to establish an on-bill financing programs for residential customers statewide. In fact, a recently proposed "community benefits package" for Lana'i residents in conjunction with the proposed wind farm contains a provision to provide an on-bill financing program to Lana'i residents for solar water heaters.

I respectfully request that these committees forward HB 1520 to help lower the cost of living to residents statewide while helping Hawai'i achieve its clean energy goals.

Thank you for the opportunity to testify.

Douglas A. Codiga

Testimony for ENE 3/22/2011 2:45:00 PM HB1520

Conference room: 225
Testifier position: support
Testifier will be present: No
Submitted by: anthony aalto
Organization: Individual
Submitted on: 3/21/2011

Comments:

Aloha Chair Gabbard and members of the committee, Thank you for the opportunity to testify.

If we are to meet our target of replacing 70% of our oil and coal imports with clean alternative fuels by the year 2030, we have to explore every avenue open to us, we have to be creative. Above all we have to find ways to help ordinary folks afford the initial costly investments in energy efficient appliances and photovoltaic systems.

This bill is an excellent initiative and I urge you to support it.
Mahalo
anthony aalto