SB 182

NEIL ABERCROMBIE
GOVERNOR

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LT. GOVERNOR

STATE OF HAWAII
OFFICE OF THE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

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TO THE SENATE COMMITTEES ON ENERGY AND ENVIRONMENT
AND COMMERCE AND CONSUMER PROTECTION

THE TWENTY-SIXTH LEGISLATURE
REGULAR SESSION OF 2011

THURSDAY, FEBRUARY 3, 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, THE
HONORABLE ROSALYN H. BAKER, CHAIR, AND MEMBERS OF THE COMMITTEES

SENATE BILL NO. 182 – RELATING TO RESIDENTIAL ENERGY DEVICES.

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.

TESTIMONY OF CARLITO P. CALIBOSO
CHAIRMAN, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
SENATE COMMITTEES ON ENERGY & ENVIRONMENT
AND
COMMERCE & CONSUMER PROTECTION
FEBRUARY 3, 2011

MEASURE: S.B. No. 182
TITLE: Relating to Residential Energy Devices.

Chairs Gabbard and Baker and Members of the Committees:

DESCRIPTION:

This bill 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 Commission appreciates the intent of this bill; however, the Commission has concerns with this bill, 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:

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.

Thank you for the opportunity to testify.

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February 2, 2011

The Honorable Mike Gabbard, Chair
Senate Committee on Energy and Environment

The Honorable Rosalyn H. Baker, Chair
Senate Committee on Commerce and Consumer Protection
State Capitol, Room 211
Honolulu, Hawaii 96813

RE: S.B. 182 Relating to Residential Energy Devices

HEARING: Thursday, February 3, 2011 at 2:45 p.m.

Aloha Chair Gabbard, Chair Baker and Members of the Joint Committees:

I am Myoung Oh, Government Affairs Director, here to testify on behalf of the Hawai'i Association of REALTORS® ("HAR"), the voice of real estate and its 8,500 members in Hawai'i. HAR **expresses concerns** on S.B. 182 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.

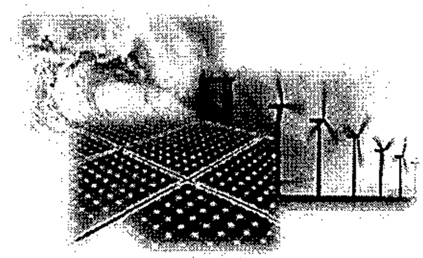
(2) Financial obligations related to on-bill financing should be borne by the owner of real property who implemented the improvements if it is done with state funds such as the public benefits fee. HAR believes that upon transfer of the property, the originating owner's participation in the on-bill financing 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 customers with clear and accurate amortization schedules, interest rates, origination fees, and/or credit terms and conditions.

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

Mahalo for the opportunity to testify.

blue planet FOUNDATION



SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION
February 3, 2011, 2:45 P.M.
Room 225
(Testimony is 3 pages long)

TESTIMONY IN STRONG SUPPORT OF SB 182

Chairs Gabbard and Baker and members of the Committees:

The Blue Planet Foundation strongly supports SB 182, a measure directing the Public Utilities Commission to establish an on-bill financing program for residential electricity customers.

On-bill financing—or "pay as you save" financing—is one of the most powerful tools to increase adoption of energy efficiency and clean energy investments. Like the property assessed clean energy financing, on-bill financing overcomes the biggest hurdle to energy efficiency and clean energy adoption: 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.

Consumers have proven to be terribly 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.

An examination of some of the economic barriers present in the diffusion of energy efficiency technologies provides insight into the challenges of greater adoption of efficient appliances and photovoltaic. Empirical studies examining the purchase of energy-saving devices reveal that high initial investment costs—regardless of the money savings from reduced electricity use—

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fosters to a tendency to avoid energy saving innovations. These decisions can result in outcomes that are economically suboptimal considering likely investment alternatives available to the decision maker. By foregoing certain energy efficiency investments, individuals demonstrate implied discount rates that are frequently an order of magnitude or higher over the prevailing discount rate. The table on page 5 of this testimony shows a sample of implied discount rates from a literature review compiled by Sanstad, et al.[1]

A 1983 study on refrigerators[2] is notable for being one of the first to use very specific data and a simple technique. They examined two refrigerator models sold by the same national retailer between 1977 and 1979. The two refrigerators were identical in nearly every way except their energy use and cost: one used 410 kilowatt-hour (kWh) per year less electricity but cost $60 more. Using a 6% discount rate and a 20-year lifetime, the more efficient refrigerator saved energy at an electricity cost of just over one cent per kWh—lower than electricity prices prevailing in every state at the time. Despite being widely advertised and being recommended by a prominent consumer magazine, the energy-efficient refrigerator was purchased by customers less frequently than the less expensive inefficient model. Using regional electricity cost data, Meier and Whittier calculated the implied discount rate by these purchases, which varied between 34% and 59%, depending on the region's prevailing residential electricity rate.

Average Implicit Discount Rates in Energy Efficient Investments (Sanstad, et al., 1995)

Study	End-use	Average rate
Arthur D. Little (1984)	Thermal shell measures	**32%**
Cole and Fuller (1990)	Thermal shell measures	**26%**
Goett (1978)	Space heating system and fuel type	**36%**
Berkovec, Hausman and Rust (1983)	Space heating system and fuel type	**25%**
Hausman (1979)	Room air conditioners	**29%**
Cole and Fuller (1980)	Refrigerators	**61-108%**
Gately (1980)	Refrigerators	**45-300%**
Meier and Whittier (1983)	Refrigerators	**34-58%**
Goett (1983)	Cooking and water heating fuel type	**36%**
Goett and McFadden (1982)	Water heating fuel type	**67%**

[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.

The issues that give rise to the "energy-efficiency paradox" are likely to be more pronounced in the decision to purchase a photovoltaic system, with high initial investment costs and lengthy payback times. Expanding the on-bill financing program to energy efficient appliances (such as high efficiency refrigerators) and residential photovoltaic systems will help to eliminate this barrier and make these money-saving technologies more accessible to local residents.

Blue Planet believes that 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.

Blue Planet respectfully asks that these committees forward SB 182 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.

Sierra Club
Hawai'i Chapter
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SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

February 3, 2011, 2:45 P.M.
(Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF SB 182 WITH PROPOSED AMENDMENTS

Chair Gabbard, Chair Baker and Members of the Committees:

The Sierra Club, Hawaii Chapter, with 8,000 dues paying members and supporters statewide, ***supports*** SB 182. This measure would direct the Public Utilities Commission to implement an on-bill financing program for residential electric utility consumers.

Until we solve the problem of upfront cost, it is unlikely that clean energy will make a significant penetration into the residential market. Currently less than 1% of our electricity comes from distributed solar. We've tried a wide-range of policies -- like expedited permitting, tax incentives, and educational programs -- and yet the installation rate of residential clean energy systems is fair lower then anyone would like to see.

Our society has evolved into a pay-as-you-go system. No one would consider paying $19,200 for twenty years of cell phone service, although that is the approximate cost of a modern iphone ($80 per month x 12 months x 20 years). Similarly, too few people are willing to pay $42,000 for a clean energy system that locks in today's energy rates (average bill of $175 x 12 months x 20 years).

SB 182 simply is smart policy. By establishing a pay-as-you-save program, it could lead to the development of a stronger renewable energy market, wean Hawai`i off of fossil fuels, and put more money into the pocket of Hawai`i residents.

What distinguishes SB 182 from prior years is that the utilities no longer need to handle financing. The public benefits fee administer has access to all of the billing information and software. It will be possible for the PUC to contract this responsibility out and keep the utilities role to a bare minimum.

That being said, any bill can be improved. We suggest removing the express reference to an "ENERGY STAR refrigerator." We see problems with ensuring the refrigerator stays with the house as a secured fixture. To avoid concerns about potential security risks, we suggest leaving this item out of the bill. If the PUC is able to devise a program that allows for such financing, then they will have the authority to do so.

The Sierra Club respectfully asks that this committee advance this measure. Mahalo for the opportunity to testify.

Testimony Before the Senate Committees
On
Energy and Environment
And
Commerce and Consumer Protection

February 3, 2011 (2:45 pm)

S.B. 182 RELATING TO RESIDENTIAL ENERGY DEVICES

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

Chairs Gabbard and Baker, and Members of the Committees:

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 S.B. 182.

S.B. 182 directs the Public Utilities 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. However, Hawaiian Electric and its subsidiaries have had some experience with on-bill financing programs and have the following comments.

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. 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 2009.

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. The current bill proposes 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.

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

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

Testimony for ENE/CPN 2/3/2011 2:45:00 PM SB182

Conference room: 225
Testifier position: support
Testifier will be present: No
Submitted by: Brian Bell
Organization: Individual
Submitted on: 2/2/2011

Comments:
Aloha Chair Gabbard and members of the Committee:

It is with great pleasure that I submit my testimony in strong support of SB 199. Although we have had tax incentives for awhile now, we only have about 1% distributed solar generation on the grid. This is because we are asking people to pay for their energy 20 years in advance.

People would not be willing to pay for their Internet service 20 years in advance ($50/mo x 12mo x 20yr = $12,000), so why are we asking people to do the same for solar?

This bill is a great step in the right direction and I hope you will give it good consideration.

Thank-you for the opportunity to testify.