

TESTIMONY OF CARLITO P. CALIBOSO
CHAIRMAN, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL PROTECTION
AND HOUSING
MARCH 17, 2009

Bill No. 390
Support Y N
Date 3/17/09
Time 7:36
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Type 1 2 WI

MEASURE: S.B. No. 390 S.D.2
TITLE: Relating to Energy Resources.

Chairs Morita and Cabanilla, and Members of the Committees:

DESCRIPTION:

This bill proposes to amend provisions of Act 204, Session Laws of Hawaii ("SLH"), 2008, and section 196-6.5, Hawaii Revised Statutes ("HRS"), to move the duty of processing variances for mandatory solar water heating installations from the energy services coordinator to the Public Benefits Fee ("PBF") Administrator under Chapter 269, HRS, Part VII. In addition, the bill requires the PBF Administrator to conduct post-installation verification inspections of the solar water heaters installed.

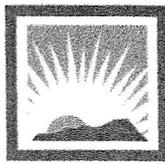
POSITION:

The Commission appreciates the intent of this bill, but it is not necessary given the provisions of SB 1173 SD2, which we prefer.

COMMENTS:

- This Committee should be aware that this bill will add to the duties and responsibilities of the PBF Administrator, which will be funded by ratepayers under Chapter 269, HRS, Part VII.
- In addition, this bill would further require the PBF Administrator to conduct post installation inspections of mandatory solar water heating installations, and would divert more funding that could be used to achieve greater energy savings through more innovative energy efficiency programs.

Thank you for the opportunity to testify.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Mar. 17, 2009
Room 325
9:30 A.M

House
EEP/HSG
SB390 SD2

Mark Duda
President

Testimony in Support

Chair Morita, Chair Cabanilla and Members of the Committees:

Basis for Testimony

HSEA members manufacture and install the vast majority of solar water heating systems deployed in the State of Hawaii. Our comments on this measure are based on this expertise, and our related experience in energy efficiency and other renewable energy technologies.

HSEA makes the following comments regarding this measure:

SB390 SD2 makes a number of important changes, all of which HSEA supports. HSEA notes, however, that this draft of SB390 retains the variance that allows developers to comply with Hawaii's innovative 'solar mandate' by installing tankless gas heaters.

Like many groups linked to environmental causes and/or renewable energy, HSEA believes that the presence of a gas variance is not good public policy. It is also not consistent with the intent of the Act 204, which is to reduce fossil fuel consumption in Hawaii by taking advantage of our state's rich, indigenous energy resources to heat water.

Conference Committee Report #169-08 on what was SB644 notes that:

The purpose of this bill is to lessen Hawaii's dependence on fossil fuels by:

- (1) Requiring solar thermal water heaters installed in homes constructed after January 1, 2010, to comply with the standards of any ratepayer financed energy efficiency rebate program administered by an electric utility or public benefits fund administrator that is in effect at the time permits are issued for the home;
- (2) Requiring the Public Benefits Fund Administrator to support compliance verification of solar thermal water heaters installed in new single-family residences after January 1, 2010; and
- (3) Including in the Public Benefits Fund Administrator duties the responsibilities of:
 - (A) Maintaining or improving current residential solar thermal water heating system standards (standards);

(B) Verifying compliance with the standards; and

(C) Determining the necessity for, and convening as necessary, an advisory committee to review the standards.

HSEA believes that Hawaii's dependence on fossil fuels cannot be "lessened" by allowing developers to comply with a solar 'mandate' by installing a device that burns fossil fuel. The gas variance is a loophole that allows developers to *choose* gas even when the solar resource is sound. In current law, gas derived from fossil fuels and burned to heat water is not a fall back for instances where solar cannot do the job – it is an allowed alternative to solar no matter how much sun falls on the building site.

With access to this loophole, given the lower up front cost of gas and the fact that the developer never has to pay the actual gas bill, it is unrealistic to expect developers *not* to choose gas over solar. In these difficult economic times, it will take a courageous developer indeed to willingly increase her initial price point relative to her competitors. As a result, with the gas loophole in place, gas water heaters will progressively dominate new construction for decades, one subdivision at a time, leaving no need for solar water heating systems. Hawaii will see fewer solar water heaters installed with the 'mandate' than without.

In closing, HSEA would also like to point out that closing the gas loophole would never prevent developers from choosing tankless gas water heaters when the solar resource is inadequate.

About the Hawaii Solar Energy Association

Hawaii Solar Energy Association (HSEA) was founded in 1977 and is comprised of more than 30 installers, distributors, manufacturers and financiers of solar energy systems, both hot water and PV, most of which are Hawaii based, owned and operated. The organization's 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.



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

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Statement of
THEODORE E. LIU
Director
Department of Business, Economic Development, and Tourism
before the

**HOUSE COMMITTEES ON
ENERGY & ENVIRONMENTAL PROTECTION
and
HOUSING**

Tuesday, March 17, 2009

9:30 a.m.

State Capitol, Conference Room 325

in consideration of
SB390 SD2
RELATING TO ENERGY RESOURCES.

Bill No. 390

Support Y N

Date 3/16/09

Time 1500

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Chair Morita, Chair Cabanilla, Vice Chair Coffman, Vice Chair Chong, and
Members of the Committees.

The Department of Business, Economic Development, and Tourism (DBEDT) supports SB390 SD2, which amends provisions of the mandatory solar water heating measure passed last session. The amendments transfer variance approval to the Public Benefits Fee Administrator (PBFA), clarify variance request procedures and authority, reduce the tax credit for substitute renewable energy systems installed under the mandate, provide guidance for solar water heater system standards, and allow use of demand-side management surcharge moneys for verification inspections.

We strongly support the amendment which transfers authority for variance approval to the PBFA in SB390 SD1, and offer an amendment to address any utility which collects the demand-side management surcharges but is not affected by the PBFA.

We offer an amendment to clarify administration of the variance by utilities not served by the PBFA for page 1, line 8, with the insertion of the following sentence: “For any utility which has received public utility commission approval to collect a demand side management surcharge from ratepayers, and which is not served by the public benefits fee administrator, the utility shall administer the variance and any standards established for solar water heating systems.” Since the surcharge is used to support utility energy-efficiency and demand-side management programs, including solar water heating programs and standards, administration of the variance is in accord with these programs.

Thank you for the opportunity to offer these comments.

Testimony Before the House Committees
On
Energy & Environmental Protection and
Housing

March 17, 2009 (9:30 a.m.)

S.B. 390 SD 2 RELATING TO ENERGY RESOURCES

By: Joanne Ide
Energy Services Department
Hawaiian Electric Company, Inc.

Bill No. 390

Support Y N

Date 3/16/09

Time 1620

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Chairs Morita and Cabanilla, Vice Chairs Coffman and Chong, and Members of the Committee:

My name is Joanne Ide, 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 SB 390, SD2.

SB 390, SD 2 clarifies the provisions of Act 204, Session Laws of Hawaii 2008, with respect to new single-family dwellings and the variances for solar water heater systems. Hawaiian Electric Company supports the intent of this measure with some suggested amendments.

HECO believes that the intent of the law enacted by Act 204 was to wean our state off our dependency on fossil fuel and recognizes that solar water heaters may not be the optimal solution in all situations. Examples include when hot water requirements are low or are seasonal or the dwelling is shaded for most of the solar day. In those cases, other energy efficient water heating technology, including gas, can be considered because the installation of a solar water heater is either impracticable due to poor solar resource or not as cost effective as another technology.

We have attached proposed language to reflect our suggestions as noted above.

We believe that with these amendments, the law enacted by Act 204 will truly reflect the Legislature's intent of weaning our state off our dependency on fossil fuel.

Thank you for this opportunity to testify on this measure.

Suggested Amendments to SB 390, SD 2 (HECO suggested changes are in bold)

SECTION 1. Section 196-6.5, Hawaii Revised Statutes, is amended by amending subsections (a) and (b) to read as follows:

"(a) On or after January 1, 2010, no building permit shall be issued for a new single-family dwelling that does not include a solar water heater system that meets the standards established pursuant to section 269-44, unless the [~~energy resources coordinator~~] public benefits fee administrator approves a variance. A variance shall only be approved if an architect or mechanical engineer licensed under chapter 464 attests that:

- (1) Installation is impracticable due to poor solar resource;
- (2) Installation is cost-prohibitive based upon a life cycle cost-benefit analysis that incorporates the average residential utility bill and the cost of the new solar water heater system with a life cycle that does not exceed fifteen years;
- (3) A substitute renewable energy technology system, as defined in section 235-12.5, is used as the primary energy source for heating water; or
- (4) A demand water heater device approved by Underwriters Laboratories, Inc., is installed; provided that at least one other gas appliance is installed in the dwelling, **and the first or second variances in subsection (a)(1) and (a)(2) of this section are met.** For the purposes of this paragraph, "demand water heater" means a gas-tankless instantaneous water heater that provides hot water only as it is needed; ~~or~~



Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803
808.537.9019 hawaii.chapter@sierraclub.org

Bill No. 390

Support Y N

Date 3/16/09

Time 1839

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HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION HOUSE COMMITTEE ON HOUSING

March 17, 2009, 9:30 a.m.
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 390 SD2, WITH AMENDMENTS

Aloha Chair Morita, Chair Cabanilla, and Members of the Committee:

The Sierra Club, Hawai'i Chapter, with 5500 dues paying members statewide, supports SB 390 SD2 with amendments. We are greatly concerned the Gas Company will subvert the intent of the historic Solar Roof Act by enticing developers -- by way of free appliances or monetary enticements -- to install gas heaters instead of solar water heaters. Consumers will be deprived of the economic efficiency of solar water heaters. Further, Hawai'i will not see a reduction in the amount of oil consumed.

Currently, our law allows for four variances to the "mandatory" solar hot water heater. The first two provide for a variance if the installation of a solar heater would be inefficient (i.e., the location is too shady) or cost prohibitive. The third variance allows for a "substitute renewable energy technology," i.e., it allows for future technology to be installed.

The fourth variance, however, is really **not** a variance. Haw. Rev. Stat. § 196-6.5 simply allows for the installation of a gas water heater. Thus, our law currently mandates the use of either a solar or a gas water heater. No other technology or "choice," such as an on-demand energy efficient water heater, is allowed.

Gas water heaters **are simply not as economic or as efficient as solar hot water heaters**. The home owner will have to pay a monthly charge for gas that is far in excess of the ordinary maintenance charges for a solar water heater. Further, the Gas Company is still reliant upon oil importation for refinement process to create "dirty" gas. In other words, if our current efforts to reduce Hawai'i's oil dependence are successful, the Gas Company would still require importation of oil, perhaps at the current level, into our state.

The Sierra Club is open to considering future amendments to this bill should the Gas Company prove it is capable of producing gas based on renewable sources but, inasmuch as this concept is *at least* five years in the future, believes that the so-called "gas variance" should be removed so as to encourage the most economical and clean means of heating water -- solar.

The solar mandate was a critical step in securing Hawaii's energy future, reducing our contribution to global climate change, and improving the affordability of housing in Hawai'i. As any with any good measure, however, improvements could be made. To the extent these improvements result in a solar water heater on each and every home in Hawai'i, the Sierra Club supports these efforts.

Thank you for the opportunity to testify.



Robert D. Harris, Director



March 16, 2009

Testimony on SB390, SD2 Relating to Energy Resources

Aloha Chair Morita, Vice Chair Coffman and Members of the Energy and Environmental Protection Committee:

Aloha Chair Cabanilla, Vice Chair Chong and Members of the Housing Committee:

My name is Thomas Young. I am the Senior Vice President Operations of The Gas Company. Thank you for the opportunity to provide testimony on SB390, SD2, Relating to Energy Resources.

The Gas Company would like to provide comments on SB390, SD2, which clarifies provisions of Act 204 (2008) related to solar water heaters. Last year, The Gas Company supported passage of Act 204 (2008) because its intent was to promote greater energy efficiency while providing more consumer options in all new home construction beginning January 2010.

When the Legislature enacted Act 204 (2008), crude oil prices had risen from \$65 to over \$100 per barrel in less than a year. The Legislature found that a conventional electric water heater tank accounts for 30 to 35 per cent of a home's electric bill and that a replacement through the installation of a solar water heater system, a comparable renewable energy system, or a demand water heater system in new homes could result in energy and cost savings to the homeowner. The one time, upfront cost for any one of these water heating systems is similar.

Act 204 (2008) promotes energy efficiency and consumer options by allowing an energy efficient demand water heater system along with one other gas appliance as a variance to solar water heating systems in new home construction. The Act recognizes that a demand water heater is an energy-efficient alternative. Lastly, the Act provides that homeowners and builders have access to a number of energy-saving options and alternatives.

The gas we manufacture at Campbell Industrial Park and deliver to homes and business on Oahu is made from by-products of oil imported to produce gasoline, diesel, and other petroleum products. It does not require us to import additional crude oil.

Act 204 (2008), as passed last year with the inclusion of energy efficient water heating systems, had broad-based support. This landmark legislation is a significant and positive step towards achieving the Legislature's vision of promoting energy security and reducing Hawaii's dependence on petroleum. We believe Act 204 (2008) should be given a change to work.

Thank you for allowing The Gas Company to present these comments on SB390, SD2.

Bill No. 390

Support Y N

Date 3/16/09
Honolulu, HI 96802-3000

Time 1923

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