SB 1198

TESTIMONY OF CARLITO P. CALIBOSO
CHAIRMAN, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
SENATE COMMITTEE ON ENERGY & ENVIRONMENT
FEBRUARY 03, 2009

MEASURE: **S.B. No. 1198**
TITLE: **Relating to Energy Resources.**

Chair Gabbard and Members of the Committee:

DESCRIPTION:

This bill proposes to clarify provisions of Act 204, Session Laws of Hawaii ("SLH"), 2008, and section 196-6.5, Hawaii Revised Statutes ("HRS"), with respect to variances for solar water heater systems made available pursuant to solar water heater system standards authorized and developed by the public utilities commission ("Commission") under section 269-44, HRS. The bill also amends section 269-44, by removing the date certain by which the Commission standards are to be established and allows the Commission to contract with the public benefits fee ("PBF") administrator for the development of those system standards. In addition, this bill amends section 235-12.5, HRS, relating to tax credits available for solar thermal energy systems.

POSITION:

The Commission has no objection to section 4 of this bill as it proposes to amend section 269-44, HRS, relating to the Commission being authorized to contract with the PBF administrator to develop standards for solar water heater systems. The Commission has no comments regarding the remaining sections and elements of this bill.

Thank you for the opportunity to testify.

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR

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
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
Tuesday, February 3, 2009
2:45 p.m.
State Capitol, Conference Room 225

in consideration of

SB1198
RELATING TO ENERGY RESOURCES

Chair Gabbard, Vice Chair English, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) does not support SB1198 which directs the Energy Resources Coordinator to accept solar hot water variance requests and outlines procedures for variances. SB1198 also reduces tax credit amounts to be claimed under certain circumstances.

We, support SB871, an Administrative measure, which directs the Public Benefits Fee Administrator with implementing energy efficiency programs, including solar water heating incentive programs and variances for these programs.

We defer to the Department of Taxation on tax matters.

Thank you for the opportunity to offer these comments.

LINDA LINGLE
GOVERNOR

JAMES R. AIONA, JR.
LT. GOVERNOR

KURT KAWAFUCHI
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SENATE COMMITTEE ON ENERGY & ENVIRONMENT
TESTIMONY REGARDING SB 1198
RELATING TO ENERGY

TESTIFIER: KURT KAWAFUCHI, DIRECTOR OF TAXATION (OR DESIGNEE)
DATE: FEBRUARY 3, 2009
TIME: 2:45PM
ROOM: 225

This clarifies application of the required solar-thermal energy system law.

The Department of Taxation **prefers SB 871**, which better accomplishes the renewable energy policy needed to reduce the State's dependence on oil.

SUPPORT FOR ALTERNATIVE ENERGY—The Department strongly supports the encouragement and implementation of alternative energy systems in Hawaii in order to lessen the State's dependence on alternative energy. As fossil fuel and petroleum prices become more volatile, Hawaii's ability to generate its own energy from home will make the State more secure and less reliant on others. The Department concurs that photovoltaic and other sun-related energy generation is particularly beneficial given Hawaii's relative location to the sun.

BUILDING PERMIT LANGUAGE WAS UNCLEAR—The Department prefers the language in SB 871. The Department understands the intent that only "new construction" homes are to be disqualified. However, the law is not that clear. A building permit is necessary for any addition or amendment to a home, as well as installation of the energy system. The issue then, is that the term "building permit" could be interpreted to be any permit, which could disqualify a taxpayer. However, by eliminating the permit language, as this bill does, any single-family home may qualify for the solar thermal credit even newly-constructed homes where the solar water heater is mandated by HRS § 196-6.5.

This bill has a minimal positive impact.

THE GAS COMPANY

P.O. Box 3000
Honolulu, Hawaii 96802-3000

February 2, 2009

Testimony for SB 1198 Relating to Energy Resources

Aloha Chair Gabbard, Vice-Chair English and Members of the Committee.

My name is Jeffrey Kissel, President and CEO of The Gas Company. Thank you for the opportunity to provide testimony on SB1198, relating to energy resources.

The Gas Company strongly supports SB1198 which clarifies solar water heater variance request procedures and provides guidance with respect to solar water heater system standards.

The Gas Company applauds the passage of Act 204 (2008), which was a tremendous step in helping our Hawaii residents increase their household energy efficiency. SB 1198 maintains the integrity of Act 204 (2008) and its promotion of energy efficiency in Hawaii by requiring that solar water heating or on-demand gas water heaters be installed in the construction of all new single family residences, unless installation is impracticable due to poor solar resource, cost-prohibitive, or can be substituted with a renewable energy device.

SB1198 maintains consumer choice among high efficient, reliable water heating technologies and recognizes that on-demand gas water heaters are an energy efficient alternative for residential homeowners to consider when they decide how best to heat their water.

A gas assisted solar water heating device uses only one-eighth as much oil to heat a gallon of water then electric water heating appliances. For other uses, gas has no more than one-third the carbon footprint than comparable electric appliances. We have attached additional data to our testimony to support these statements.

We believe that on-demand gas water heaters are an energy efficient means of heating water when compared to other alternatives and should, along with solar water heating systems, remain an option for Hawaii consumers.

The Gas Company continues to support the State's efforts in encouraging energy efficiency and diversifying our alternative energy sources. As a utility, we are proud of our continuing ability to provide safe and reliable energy to the people of Hawaii.

We encourage you to support this bill and retain consumer choice options for energy efficiency provided in Act 204 (2008).

Thank you for allowing The Gas Company to present these comments.

Heating Up: the Debate about Instantaneous Water Heaters

What is an instantaneous water heater? Sometimes called tankless or demand water heaters, instantaneous water heaters (IWHs) don't have storage tanks, and therefore don't have the standby losses of tank-type conventional water heaters (CWHs). Consequently, they must have enough heating capacity to instantly heat water flowing through at various flow rates and temperatures. More sophisticated models modulate electric or gas input to handle widely fluctuating input water temperatures from solar systems.

Are IWHs significantly more efficient than conventional water heaters? IWHs, by avoiding standby losses (heat losses to ambient air from storing hot water), are more efficient than conventional water heaters. The question is how much more efficient. Standby losses depend on water heater design, size of the tank, ambient temperature, set point temperature, and hot water draw rate.

To reduce exaggerated claims, GAMA (Gas Appliance Manufacturers Association) rates residential gas water heaters under a standard test procedure. Based on the results of the testing, each model is assigned an Energy Factor (EF) value. The EF represents the fraction of hot water energy delivered (41,045 BTUs) divided by the total energy consumed, including combustion and standby losses. GAMA then calculates the annual water heating cost (at their assumed gas rate) for a typical family using 64.3 gallons a day of 1 40°F hot water, and publishes the Energy Factor and energy cost information both on their website, www.gamanet.org, and on the yellow "Energy Guide" tags on new residential water heaters. Energy Factors for tank-type water heaters range from .55 to .67, while EFs for instantaneous heaters range from .80 to .92, with the vast majority hanging in the low 80's.

To give a numerical example, let's assume you're comparing energy costs of a conventional water heater model with an Energy Factor of .60 with an IWH which has an EF of .80. Immediately we know the savings will be (.80-.60)/.60, or 33%. In dollars per year at an SDG&E gas rate of $1.20 per therm, this is (41,045/100,000)/.06 x .33 x $1.20 x 365days = $100 per year. Keep in mind that this example is comparing new water heaters, using the GAMA 64.3 GPD (41,045 BTUs a day) profile. If your actual daily draw is much higher or lower than 64.3 GPD, the resulting savings will be somewhat proportional. The savings with higher consumption are not strictly proportional (but close) because higher cold water daily flows through a tank-type heater tend to lower the average tank temperature while it recovers. Therefore the standby losses go down and the Energy Factor goes up.

A large US manufacturer, Bradford White, which makes both tank-type water heaters and tankless water heaters, tested two conventional water heaters versus two instantaneous water heaters. They published the results in PM Engineer Magazine, January 7, 2005. The results showed some interesting conclusions:

- first, tank-type water heaters are becoming more efficient so the savings of tankless models is less,
- second, the constant-burning pilot light on one tankless model nearly wiped out the savings in standby losses,
- third, higher draw rates (107 GPD vs. the GAMA 64 GPD) seemed to raise the Energy Factors of the tank-type water heaters,
- finally (San Diegans take note!) water hardness was more detrimental to tankless water heaters than to tank-type water heaters. The tankless water heaters lost nearly

2% efficiency in only two weeks! This may be explained by higher intensity combustion in the tankless unit, impacting slow-flowing hard water in a constricted passageway. Bradford White recommends periodic de-liming service or water softening in hard water areas.

Is it good to combine IWHs with solar water heating? It's good if your goal is to squeeze out every last bit of savings, such as for a Zero Net Energy home or to fight global warming. But the economic advantages are marginal. The solar system should be sized to save about 70% of water heating energy, which leaves only 30% for the IWH to work on. Given the GAMA example above, with $1.20 per therm, the IWH savings would be reduced from $100 per year to 0.33 x $100 = $33 a year. Given that installed costs for IWHs can be twice those for conventional water heaters ($1600 vs. $850), the payback for the additional investment of $750 would be $750/$33 = 23 years. If you're a serious global warming battler, go for it! .

The following chart compares total undiscounted 20-year lifecycle costs for various types of water heaters. It reflects San Diego area gas & electric energy costs, and assumes no inflation of these costs. Note that solar does very well in this comparison because it is highly incentivized through 2008. Also note that if rates rise and if longer periods are evaluated (solar collectors should last 30 years), the comparative benefit of solar is even greater.

Comparing Life Cycle Costs

Water Heater Type	Energy Factor (EF)	Cost	Yearly Energy Cost	Life (Years)	20 Year Total Cost
Conventional Gas Tank-type heater	0.6	$850	$300	13	$7,700
Electric Tank-type heater	0.9	$750	$634	13	$14,180
Gas Demand heater (no pilot)	0.8	$1,600	$225	20	$6,100
Solar with electric heater (1-tank)	3	$2,660	$190	20	$6,460
Solar with gas heater (2-tank)	2	$3,360	$90	20	$5,160

Notes.

1. Costs are installed costs. Solar gross costs: 2-tank gas backup = $6,000 Solar 1-tank electric backup = $5,000
2. Based on 64.3 gallons a day (family of four, 41,045 Btus a day)
3. $1.20 a therm for gas. $.13 a kWh for electric
4. **No fuel price escalation**
5. Solar based on 70% Solar Fraction
6. Solar cost reduced by 30% Federal Tax Credit and CCSE rebate of about $1 ,200*
7. The average electricity cost for large homes can reach$0.20/kWh or more

*** SWH rebates and Federal Tax Credits expire Dec. 31, 2008**

Resources

1. www.aceee.org/consumerguide/waterheating.htm
2. www.gamanet.org
3. www.eere.energy.gov/consumer

Hawaii Solar Energy Association
Serving Hawaii Since 1977

February 1, 2008

SB1198: Testimony in Partial Support but with Significant Caveats

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

Hawaii Solar Energy Association (HSEA) is comprised of more than 30 installers, distributors, manufacturers and financers 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.

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 other renewable energy technologies.

HSEA would like to begin by noting that there are seven bills in this hearing that attempt to alter, fix, or expand the requirement that new homes use solar water heating systems to heat the water for their homes. Because the seven proposals in many cases overlap and/or implement some of the same changes in different ways, HSEA has decided that it will be most valuable to the committee to provide a comprehensive response to the issues raised in these seven bills, followed by specific testimony on each bill. This comprehensive response unfolds as discussion of the five most important issues raised by these 'solar mandate' bills, followed by a statement of HSEA's position on each issue.

ISSUE #1: ***Clarifying that the Trigger for Applicability of the Mandate is the Origination of a Permit to Build a <u>New Single Family Home</u>, Rather than the Origination any <u>New Building Permit</u>.*** Some argue that Act 204 created ambiguity regarding whether the origination of any new building permit (including permits for unrelated activities, such as adding a bathroom) would trigger the requirement that a solar water heater be installed on the dwelling. Others argue that the language is currently

specific enough to avoid this confusion. Several bills attempt to solve the problem definitively by removing any and all ambiguity.

HSEA Position: HSEA supports the goal of restricting the applicability of the solar water system mandate to new dwelling units. Although HSEA members, as installers of the majority of solar water heating systems in the state, would likely benefit from a requirement that anyone who wants to do any form of home improvement must also install a solar water heating system, this seems not to have been the intent of the legislation. HSEA sides here with the public interest in maintaining a clear linkage between legislative intent and legislative consequences.

Bills in this hearing that successfully clarify the issue are: SB390, SB1198

ISSUE #2: ***Variances Developers May Use to Avoid the Requirement for Solar Hot Water and Incentive Parity across Technologies for Heating water.*** Act 204 established four categories of variances that could be granted to developers that would allow them not to install solar water system on new homes built under building permits originated after the effective date of the mandate. These are: (1) inadequacy of the solar resource; (2) unreasonable payback period; (3) use of wind or solar photovoltaics to hear water instead; (4) use of a tankless gas water heater to heat water.

Variance categories (1) and (2) are standard approaches to the challenge of granting necessary and reasonable exceptions to avoid unintentionally requiring inappropriate/inadequate systems for heating water that could result in the need to buy an additional water heating system or deal with the inconvenience of water that is not hot enough.

Variance (3) is a generally seen as either a more costly way to heat water (PV) or has not achieved any meaningful level of market penetration in Hawaii (wind) for single-family residences. Some have argued that these are not appropriate reasons to forbid developers from using them if they so choose. Others have argued that the issue is not the choice of renewable technology but the tax incentive asymmetry that results from a mandate that eliminates tax incentives for one technology (solar hot water) while other technologies (PV and wind) retain their tax incentives.

Variance (4) is something of a loophole in what is widely referred to as the 'solar mandate act.' Some argue that allowing a gas variance is acceptable on the grounds that burning gas to heat water requires less fossil fuel and, hence, emits less carbon than heating water with electricity. This appears, however, to be a matter of dispute, as others argue that this comparison does not take account of the energy used in transforming petroleum into the synthetic gas that is the only kind of gas available in Hawaii. In addition, HSEA notes that the share of grid power produced by burning fossil fuels varies across utilities and over the course of the day. For instance, HELCO recently hit 60% renewables for a brief period and has averaged over 30% for longer periods.

HSEA Position:
Variance (3). HSEA is strongly in favor of efforts to lower the use of fossil fuels in the state of Hawaii. To this end, HSEA supports the existence of the wind/PV variance.

However, HSEA prefers that solar water heating not have its subsidy reduced while those of other technologies remain in place. HSEA is indifferent as to whether this is achieved by reinstating the subsidy for solar hot water or by reducing the subsidy for PV and wind by an amount equivalent to that lost by solar hot water under Act 204.

Bills that close the subsidy gap across technologies by reinstating tax credits for solar hot water: SB554

Bills that close the subsidy gap across technologies by reducing the tax credit for PV and wind: SB390

Variance (4). HSEA strongly opposes the existence of variance 4. HSEA believes that any pathway that allows compliance with a 'solar mandate' by burning fossil fuels is fundamentally flawed and goes directly against the spirit and intent of the legislation. Further, existence of the gas loophole runs in direct opposition to broader initiatives in Hawaii to achieve energy security by weaning the state off of fossil fuels. The existence of the gas variance is especially problematic because the cost of installing a tankless gas water heater is substantially below that of a solar water heating system, which will lead many developers to choose it in order to keep the selling price of their homes as low as possible, particularly during these difficult economic times.

Bills that eliminate the gas variance: SB390

ISSUE #3: ***Extending the Mandate to Structure Types besides Single Family Detached Housing.*** If a sound public policy justification exists for requiring solar water heating on single family detached housing, it is reasonable to ask why the same justification does not apply to single-family attached housing and other types of non-detached homes. Several bills attempt this extension but do so in various ways (*e.g.*, by requiring adoption of rules in county building codes versus including under existing mandate section of HRS 196-6.5) and with varying project size thresholds for applicability.

HSEA Position: As installers of solar water heating and PV systems, HSEA members are extremely well placed to understand variations in the market for solar water heating systems across single family detached homes, condominiums and townhomes. From this perspective, HSEA notes that very few systems are installed on townhomes and condominiums while the market for such systems on single-family detached homes is strong. HSEA believes that this is a result in many cases of differences in the ability to access tax incentives across different structure types. For this reason, a mandate requiring solar to be sited on such homes may serve an important public policy goal assuming (1) the tax code is not changed to make it easier to finance solar projects on condominiums and (2) compliance by installing fossil fuel-based technologies such as tankless gas heaters is not permitted.

Bills that extend the mandate to townhomes and condos:
SB151 (blanket expansion via §196-6.5);
SB148 (expansion to 6+ single-family unit projects and all multi-family via county building code requirement §46);
SB156 (expansion to projects 50+ units via §196-6.5)

Issue #4: ***Changes to the RETITC Level and/or Cap.*** In addition to addressing issues about the applicability and/or implementation of the requirement for solar water heating, several of the bills make changes to the amount of a project's cost that can be recovered under the Renewable Energy Technologies Investment Tax Credit. This occurs either by raising the share of the project that is eligible for state tax credits (*e.g.*, by raising the credit share from 35% to 50%) or by raising the per system caps available to the purchaser/investor of the system (*e.g.*, by raising the cap from $350 to $1,000).

HSEA Position: HSEA's members are well placed to understand the current market place impediments to the broader penetration of solar. In a commercial context, the most important of these by a significant margin is the inability to monetize the RETITC. That is, the 35% level of the credit is not the problem; the inability to turn the credit into money at any level is the problem. To this end, HSEA notes that increasing the credit level on commercial systems is unlikely to markedly increase penetration of renewable energy, though some benefit would undoubtedly result. HSEA therefore supports these measures to increase the credit amount and cap limit.

For single-family residential systems, increasing the credit would increase penetration of PV if it were paired with an increase in cap levels. HSEA therefore favors increasing the credit levels for residential PV and especially increasing the cap level.

Under current rules, the multi-family credit is useless for PV and of marginal importance for solar hot water (HSEA is not aware of any multi-family wind systems). Increasing the cap level from $350 to $1,000 would be an important step in the right direction. Increasing the credit level would have little effect for PV because all systems would run into the cap. Depending on project size/design and scope, it may have an impact for solar hot water. HSEA therefore favors increasing credit level multi-family property and especially favors increasing the multi-family tax credit per system cap.

Bills that change RETITC levels and caps: SB151, SB155

Issue #5: ***Expanding the Mandate to PV.*** Despite all of the discussion about clean energy in Hawaii, little has been said about the need to require PV on new or existing homes. As a result, there is little background debate to summarize here.

HSEA Position: HSEA notes that there are many open dockets and dozens of legislative initiatives that would potentially bear on the need for such a mandate. In addition, there are marketplace developments that may substantially reduce the need for such a mandate, including at least one firm that is working with DBEDT to come to Hawaii in the second quarter of 2009. In addition, HSEA notes that the establishment of such a PV mandate would require a very involved docket for standards and specifications development. (Such a docket was required even for solar water heating where the state has had a standard approach since 1996.) Devising standards and specifications for PV will be far more difficult, and time consuming at a time when most of the relevant expertise in the state, including at the PUC, is fully engaged in related dockets. For all of these reasons, HSEA recommends that this proposal not be examined during this legislative session.

Bills that would mandate PV for new single family homes: SB155

Specific Comments on SB1198

1. HSEA believes that SB1998 makes a number of important changes to the implementation of Act 204, most of which HSEA agrees with. The changes in SB1998 that HSEA favors are: changing certain details about the administrative process for granting variances, and achieving incentive parity across renewable technologies qualifying for a variance.

2. HSEA is concerned that SB1198 intends to leave the DBEDT Director in charge of the variance granting process when the department appears to be understaffed and over tasked. HSEA prefers to see the variance granting process lodged with the Public Benefits Fee Administrator, on the assumptions that this entity will oversee various issues associated with solar water heating systems on existing homes. HSEA would prefer that the standards and specifications, the expertise, etc. all reside in the same entity.

3. HSEA is extremely concerned that SB1198 retains the gas variance, which allows developers to comply with a 'solar mandate' using of oil based synthetic gas. This goes directly against the intent of the legislation and broader efforts to improve Hawaii's energy security.

blue planet FOUNDATION

SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
February 3rd, 2008, 2:45 P.M.
Room 225
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 1198 WITH AMENDMENTS

Chair Gabbard and members of the committee:

The Blue Planet Foundation supports the intent of Senate Bill 1198, making some clarifying amendments to Hawaii's historic Solar Roofs Act that. The 2008 Solar Roofs Act, Act 204, was a critical step forward toward Hawaii's clean energy future as it ensures that nearly every new home will be equipped with a solar water heater.

The Solar Roofs Act will provide far-reaching environmental and economic benefits for Hawai'i. Based on current solar adoption rates, this new policy will reduce the need for thousands of barrels of oil annually and reduce greenhouse gas emissions by thousands of tons from the residential sector. The Solar Roofs Act will greatly increase the efficiency and affordability of new homes built in Hawai'i. Solar water heaters are among the most effective means of reducing the high electricity cost burden that residents now endure. The solar roofs bill makes the cost of living more affordable by slashing the electric utility bill of an average new home by 30 to 40 percent. When systems are built into a home during construction—and when many systems are installed simultaneously in a larger subdivision and economies of scale are realized—solar water heaters are less expensive than an electric heater retrofit. When rolled into a 30-year mortgage, homeowners with solar will start saving money on day one.

Blue Planet supports the various changes proposed in Section 2 of HB 1198. We also strongly support clarifying that the solar tax credits for homes built prior to January 1, 2010, remain in place. We believe this was the clear intent of the original Act, but making this policy abundantly clear is critical to provide comfort and certainty in the industry. We also support the suggested changes the Solar Roofs Act proposed in SB 390.

We have concerns about the proposed language in Section 4 of SB 1198 regarding the solar water heater standards to be adopted by the public utilities commission. While we support harmonizing such standards with those developed by the public benefits fund administrator, Blue Planet believes that it is critical to clearly spell out what the standards should contain to ensure high quality, high performance, and long-lasting solar water heating systems.

Thank you for the opportunity to testify.

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Sierra Club
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SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
February 3, 2009, 2:45 P.M.
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB1198 WITH AMENDMENTS

Chair Gabbard and members of the Committee:

The Sierra Club, Hawai`i Chapter, with 5500 dues paying members statewide, supports SB 1198 with amendments. The Sierra Club has reviewed the preliminary comments made by the Hawai`i Solar Energy Association ("HSEA") and is in general comport with the statements made therein. Without repeating the same points made by HSEA, the Sierra Club generally observes it supports efforts to increase the penetration of the so-called mandatory solar hot water heater act to townhouses and condominiums. Further the Sierra Club supports removing the gas variance, inasmuch as this would further the intent of the bill, namely to increase the use of solar water heaters and reduce Hawai`i's dependence on fossil fuels.

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.