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TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION AND  
COMMERCE

THE TWENTY-FOURTH LEGISLATURE  
REGULAR SESSION OF 2008

Wednesday, February 27, 2008  
2:00 p.m.

TESTIMONY OF CATHERINE P. AWAKUNI, EXECUTIVE DIRECTOR,  
DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND  
CONSUMER AFFAIRS TO THE HONORABLE REPRESENTATIVE HERKES,  
CHAIR AND MEMBERS OF THE COMMITTEE

**HOUSE BILL NO. 2550, HOUSE DRAFT NO. 1 – RELATING TO PUBLIC  
UTILITIES.**

**DESCRIPTION:**

This measure requires the Hawaii Public Utilities Commission (“Commission”) to ensure that a percentage of the total rated generating capacity produced by eligible customer-generators be reserved for electricity produced by eligible residential or small commercial customer-generators. It further allows the Commission to determine the maximum capacity for residential or small commercial customer-generators.

**POSITION:**

The Division of Consumer Advocacy (“Consumer Advocate”) supports this measure, which requires the Commission to ensure that residential and small commercial customers are able to participate in net energy metering programs by reserving a portion of the total rate generating capacity for such customers.

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COMMENTS:

Hawaii has an abundance of renewable energy resources that can and should be used to reduce our state's dependence on imported fossil fuels. Net-energy metering programs encourage customers to invest in renewable energy systems by allowing customers who own and operate certain renewable facilities to be paid the utility's retail rate for electricity generated by an eligible customer-generator and fed back to the electric grid.

In the Commission's net-energy metering docket, the Consumer Advocate was concerned that the maximum customer-generator capacity and total rated generating capacity thresholds may be too low to encourage broader use of certain renewable resources. The Consumer Advocate was also concerned, however, that net-energy metering opportunities should be made available to all customer classes, and not merely large commercial customers. As a result, the Consumer Advocate agreed to a stipulation in the Commission's net-energy metering docket, which sought to:

- (1) Increase the maximum size of the eligible customer-generator that can qualify for a net-energy metering agreement from 50 kW to 100 kW for HECO, HELCO, and MECO;
- (2) Increase the total rated generating capacity produced by eligible customer-generators from 0.5 percent to 1.0 percent of the utility's system peak demand;
- (3) Reserve a portion of the total rated generating capacity produced by residential and smaller commercial customers (capacity of 10 kW or less) on the HECO, HELCO, and MECO systems;
- (4) Require the utilities to examine impacts to their systems and determine further adjustments to the net-energy metering limitations in each of their Integrated Resource Planning processes; and
- (5) Recommend that the Commission not adopt or modify the standard for net-energy metering set forth in the Public Utility Regulatory Policies Act of 1978, as amended by the Energy Policy Act of 2005.

The approach suggested in the instant measure – requiring the reservation of a portion of the total rated generating capacity for residential and small commercial customers – appears to be consistent with that taken by the parties to the Commission's net-energy metering docket.

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  
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE  
FEBRUARY 27, 2008**

**MEASURE: H.B. No. 2550 H.D. 1**  
**TITLE: Relating to Public Utilities.**

Chair Herkes and Members of the Committee:

**DESCRIPTION:**

This bill proposes amendments to portions of chapter 269, Hawaii Revised Statutes ("HRS") relating to net energy metering. The bill, among other things, requires the Public Utilities Commission ("Commission") to 1) ensure that a percentage of the total rated generating capacity produced by eligible customer-generators be reserved for electricity produced by eligible residential or small commercial customer-generators, and 2) define maximum capacity for eligible residential or small commercial customer-generators.

**POSITION:**

The Commission appreciates the comments and amendments to H.B. 2550 by the Committee on Energy & Environmental Protection. The Commission supports this draft of the bill and offers the following comments.

**COMMENTS:**

- **The Commission has a docket currently pending related to net energy metering, Docket No. 2006-0084.**
  - The Commission initiated Docket No. 2006-0084 on April 10, 2006. Since the opening of the docket, the net energy metering caps have undergone an extensive technical and collaborative review process, including the filing of stipulations by the parties on September 17, 2007. In their stipulations, the Parties agreed to reserve between 40% to 50% of the stipulated 1.0% system peak demand for small systems that have a net energy metering generator size of 10kW or less.<sup>1</sup> The Commission is presently reviewing the stipulations and is authorized to make a determination on them, pursuant to HRS §§ 269-101.5 and 269-104.

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<sup>1</sup>In their stipulation, Kauai Island Utility Cooperative ("KIUC"), the Consumer Advocate ("CA"), Hawaii Renewable Energy Alliance ("HREA") and Hawaii Solar Energy Association ("HSEA") allocated 50% of KIUC's peak demand to the smaller systems. In the stipulation for the HECO, HELCO, MECO; the companies, the CA, HREA and HSEA agreed to reserve 40%, 50% and 50% of the 1.0% system peaks for HECO, HELCO and MECO respectively, for the small systems.

- The Commission supports this bill, which would give the Commission explicit authority to reserve a percentage of the total rated generating capacity for residential and small commercial customer-generators.

Thank you for the opportunity to testify.





**HB 2550 HD1, RELATING TO PUBLIC UTILITIES**  
House Committee on Consumer Protection & Commerce

February 27, 2008

2:00 p.m.

Room: 325

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The Office of Hawaiian Affairs (OHA) **STRONGLY SUPPORTS** HB 2550, HD1, which would increase the total rated generating capacity produced by eligible customer-generators as well as the maximum capacity of an eligible customer-generator. HB 2550 HD 1 would also require the public utilities commission to adopt rules that incorporate best practices interconnection standards.

There are two reasons why Hawai'i should continue to promote the use of net metering via the provisions offered in HB 2550, HD1:

1. Net metering has the potential of dramatically improving the economics of localized, or distributed electrical generation from renewable sources. This provides important local, national, and global benefits to the environment and the economy. HB 2550 HD 1 allows eligible customer-generators to generate power where it is most convenient to interconnect to the utility, and utilize the power on all related buildings including residences. The positive impact in states where such legislation has been passed is an improved viability of commercial and agricultural processes by both reducing the cost and improving the payback.
2. For intermittent resources like wind power, customers may not be using power as it is being generated, and net metering allows them to receive full value for the electricity they produce without installing expensive battery storage systems. This is important because it directly affects the economics and pay-back period for the investment.

HB 2550 HD 1 also ensures that best practices will be employed for safe interconnection to the utility. In

Testimony Before the House Committee on  
Consumer Protection and Commerce

By Michael V. Yamane P.E.  
Senior Electrical Engineer  
Kauai Island Utility Cooperative  
4463 Pahee Street, Suite 1, Lihue, Hawaii, 96766-2000

Wednesday, February 27, 2008, 2:00p.m.  
Conference Room #325

**House Bill No. 2550 H.D. 1 – Relating to Public Utilities**

To the Honorable Robert N. Herkes, Chair; Angus L.K. McKelvey, Vice-Chair,  
and members of the Committee:

Thank you for the opportunity to testify on this measure. My name is Mike Yamane, representing Kauai Island Utility Cooperative. I am here today to testify in support of HB 2550 H.D. 1 relating to Public Utilities and specifically regarding the establishment of Net Energy Metering (“NEM”) limits (aka, NEM Limits) for eligible residential or small commercial customer generators.

KIUC acknowledges and commends the Legislature’s desire to create incentives to promote and, when practical, increase the role of renewable generation. KIUC believes that HB 2550 H.D. 1, as drafted, is consistent with the process KIUC is currently undergoing with the Hawaii Public Utilities Commission (“Commission”) in Docket No. 2006-0084 and a summary of this proceeding is listed below for your information.

- On April 10, 2006, the Commission initiated an investigatory proceeding to determine, among other issues, whether, and to what extent, the Commission should increase (1) the maximum capacity of eligible customer-generators to more than fifty (50) kilowatts (“kW”) (aka, NEM Capacity); and (2) the total rated generating capacity produced by eligible customer-generators to an amount above 0.5 percent of an electric utility’s system peak demand (aka, Percentage Amount), under Hawaii’s existing NEM Law, codified as Hawaii Revised Statutes (“HRS”) §§ 269-101 to 269-111.
- On September 17, 2007, KIUC and the other Stipulating Parties (i.e., the Consumer Advocate, Hawaii Solar Energy Association and Hawaii Renewable Energy Association) submitted their Stipulated Settlement Letter in connection with modifying the existing thresholds or NEM Limits as it pertains to KIUC, as well as their agreements to propose a new mechanism and review process by which KIUC will ensure the regular and ongoing review of these thresholds or NEM Limits via the existing integrated resource planning process established by the Commission.

- On October 1, 2007, reply statements of positions to address, among other things, Participant Zero Emission Leasing LLC's position were filed by KIUC and the HECO Companies. The Parties' and Participant's submissions to date are currently being reviewed and considered by the Commission

Thus, through Docket No. 2006-0084 and the existing NEM Law, KIUC believes that the Commission already has the authority to reserve a percentage of eligible NEM customer-generators for residential and small commercial customers. As you are aware, KIUC is a member-owned electric cooperative. Unlike for profit corporations, cooperatives are non-profit and member-run. Without the need for profits and shareholder dividends, cooperatives are free to invest what would normally be profits (cooperatives call them "margins") in the business by allocating margins to the cooperative's members as capital credit contributions, or, eventually, by making patronage capital refunds to its members. As such, the Commission should be allowed the flexibility and authority to modify the existing thresholds, if necessary, after considering salient factors such as KIUC's cooperative structure.

Thank you for the opportunity to testify today representing KIUC.

**Testimony before the  
House Committee on  
Consumer Protection and Commerce**

**H.B. 2550 HD1 – Related to Public Utilities**

**Wednesday, February 27, 2008  
2:00 pm, Conference Room 325**

**By Arthur Seki  
Director of Technology  
Hawaiian Electric Company, Inc.**

Chair Herkes, Vice Chair McKelvey, and Members of the Committee:

My name is Arthur Seki – I am the Director of Technology in the Energy Solutions & Technology Department at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric Company (HECO) and its subsidiary utilities, Maui Electric Company (MECO) and Hawaii Electric Light Company (HELCO), hereby referred to collectively as the HECO Utilities.

In general, H.B. 2550 HD1 allows the State of Hawaii Public Utilities Commission (PUC) to reserve a percentage of eligible net energy metering (NEM) customer-generators for residential and small commercial customers. We support H.B. 2550 HD1.

As you may know, there currently is an open docket (Docket No. 2006-0084) before the PUC that is investigating whether the PUC should:

1. increase the maximum capacity of eligible NEM customer-generators to more than 50 kilowatts;
2. increase the total rated generating capacity produced by eligible NEM customer-generators to an amount above 0.5 percent of an electric utility's system peak demand; and

3. adopt, modify, or decline to adopt, in whole or in part, the NEM standard articulated in PURPA as amended by the Energy Policy Act of 2005.

On September 17, 2007, a stipulated agreement was filed with the PUC which was agreed to by all parties (Hawaii Solar Energy Association, Hawaii Renewable Energy Alliance and Consumer Advocate, and HECO) in the docket. A decision by the PUC is pending. The stipulation proposes to:

- Increases the maximum size of the eligible customer-generator that can qualify for a NEM agreement from 50 kW to 100 kW;
- Increases the total rated generating capacity produced by eligible customer-generators from 0.5% to 1.0% of the utility's system peak demand;
- Reserves 40%, 50%, and 50% of the total rated generating capacity produced by eligible customer-generators for HECO, HELCO, and MECO, respectively, for residential and smaller commercial NEM customers (system sizes of 10 kW or less);
- Utilizes the Integrated Resource Planning (IRP) process to evaluate impacts to the Utilities' systems and determine further adjustments to the NEM system size and cap limits (limits re-examined on an annual basis); and
- Recommends that the Commission not adopt or modify the standard for NEM as articulated in the Public Utility Regulatory Policies Act of 1978 (PURPA) as amended by the Energy Policy Act of 2005.

Thus, this stipulation before the PUC for approval has language in place to reserve a percentage of eligible net energy metering (NEM) customer-generators for residential and small commercial customers.

Thank you for the opportunity to present this testimony.



# Sierra Club Hawai'i Chapter

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

**HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE**  
February 27<sup>th</sup>, 2008, 2:00 P.M.

**(Testimony is 2 pages long)**

## **TESTIMONY IN SUPPORT OF HB 2550 HD1 WITH AMENDMENT**

Chair Herkes and members of the Committee:

The Sierra Club, Hawai'i Chapter, with 5500 dues paying members statewide, supports the intent of HB 2550 HD1 but would prefer the original draft of the measure which increases the limit of total net metered systems on the grid.

After wisely being passed in 2001, net energy metering slowly began with a handful of renewable energy generators. As more homeowners learn about the program and its impacts on the payback period for renewable energy devices, the subscription rate will increase. In fact, we may be nearing a "tipping point" where many residential customers invest in renewable energy devices because of their relative cost and environmental advantages. House bill 2550 should pick up where prior legislation left off—increasing the size of the allowed system and increasing the total amount of net metered energy on the grid. While we understand that the Public Utilities Commission has a docket open that examines the possibility of increasing the caps, this legislation could remove uncertainty and set out a clear policy on net metering.

The benefits of expanding net energy metering are numerous:

- Private individuals invest in the power plants of tomorrow—instead of ratepayers. Each new installed system can reduce the need to construct massive, expensive power plants, with all of their associated siting, environmental, and financial impacts. Private investors take on the risk of such investments, not ratepayers such as families and businesses.
- Diversified and decentralized power strengthens the power grid, providing more buffering from blackouts, oil price spikes, and accidents.
- Decentralized power reduces the need for ugly powerlines.
- The allowable net energy systems in this program are clean and have less impact on Hawaii's environment than coal and oil-fired powerplants.
- Growth in the renewable energy industry in Hawai'i creates jobs and high-tech business opportunities—diversifying Hawaii's economy.
- A clean kilowatt from photovoltaic systems or other clean energy devices is worth much more for Hawai'i than a dirty kilowatt from one of Hawaiian Electric's oil-fired powerplants. We should ensure that it is given at least as much value on the market.

Please pass an amended HB 2550 HD1 to expand our statewide net metering program.

Thank you for the opportunity to testify.

particular, current best practices ensure that the generation devices must be able to detect a utility outage and stop delivering electricity (or generating a voltage) to the utility grid as long as the outage continues. **OHA urges the Committee to PASS HB2550, HD1.** Thank you for the opportunity to testify.



TESTIMONY OF SUNEDISON HAWAI'I  
IN REGARD TO H.B. 2550 HD1  
RELATING TO PUBLIC UTILITIES  
BEFORE THE  
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE  
ON  
WEDNESDAY, FEBRUARY 27, 2008

Chair Herkes, Vice-Chair McKelvey, my name is Keith Cronin, President of SunEdison Hawai'i. We would like to address amendments to HD1 (to be known as HD2), how they impact the affected parties and clarify any misconceptions.

As the bill was originally structured, it gave the participants an unclear understanding of its intent and goals. When net metering was first introduced, the PUC was given the authority by the legislature to increase the statutory limitations therein as folks with energy related expertise would be best to vet these issues. Under a docket initiated in April, 2006, the Commission took up the issue of increasing the net metering limitations. At the time, oil was *only* \$60 a barrel. As you might be aware, the NEM docket process is a long and contemplative procedure that has taken nearly 2 years to review. We do understand the weight of exploring the issues before a decision can be made, but in light of recent trends in energy prices close to doubling, it is clear that customers want and sorely need an off ramp to stabilize their electricity bills.

Through further discussions amongst parties that could be affected by both the PUC NEM decision and this legislation, we understand the concern raised by some that big systems might overwhelm the net metering limitations resulting in a reduced market for small systems. We believe that the amendments contained in HD2 more than adequately address this concern.

One of the amendments removes the cap on small systems (those under 10 kW). This seems a reasonable compromise and should not raise any concerns about sudden extensive expansion of this market, given that over the last seven years fewer than 100 net metered systems have been installed on each of Oahu and the big island, and fewer than 150 on Maui.

For large systems - commercial buildings, schools, state buildings, hotels, shopping centers government facilities and airports – the amendment increases the cap so they can begin to reduce their loads. A recent client of ours, Wal-Mart, was unable to install a larger system under the current structure of NEM because they desired to mitigate more load than was currently allowed. As a result, we needed to install very expensive reverse





power relay devices, because the system was 283kW. The required reverse power relay prevents any electricity from flowing back onto the grid, thus wasting any excess energy generated that might otherwise have been used to reduce the burning of oil for electricity generation. [[The other issue, is due to the system size, they had fallen into the next tiered bracket and now become SIA- standard interconnection agreement. While this for most of the time, is ok with this particular client, a few notables are worthy of mentioning. If, for example, the store decided to shut down for a remodeling or some other event that caused them to be closed for either a day or longer, these reverse power relays will in essence, shut off the solar power to the grid and not export. The notion that the grid in a densely urban area that could not use the energy deserves some consideration. It could “flow” to the Ala Moana mall to offset load and there would be a public benefit. This is just one simple example why the caps need to increase.]]

There are other benefits to our state from HD2’s amendments to net metering. First, it will empower the homeowner or business owner to “farm” their own energy on their roofs, keeping precious dollars in their families and businesses as opposed to exporting those dollars at ever-increasing costs for burning oil for the foreseeable future. Second, all of the technical issues surrounding best practice interconnection standards have been addressed in other states, so a lot of the heavy lifting has already been done for us. Even Puerto Rico has a 1 megawatt policy in place to foster the same goals as we could in Hawaii, given the tools necessary to mirror success.

We have seen in recent weeks, a decision by the DOT and the governor, in partnership with the DOE to also reinforce the message that the content and context of this bill is necessary to reach our stated goals of becoming more self reliant and keep billions of dollars in the state.

We believe that with proper oversight through the PUC that there will be an equitable and measurable approach to managing and monitoring the growth of renewables on the grid and take appropriate steps to eliminate potential adverse unintended consequences.

Thank you for the opportunity to testify

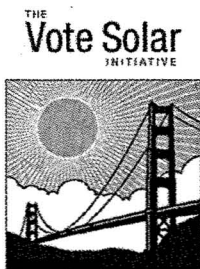
Regards,

Keith Cronin  
President  
SunEdison Hawai’i.

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TESTIMONY OF THE VOTE SOLAR INITIATIVE  
IN REGARD TO HB2550, H.D. 1  
RELATING TO NET ENERGY METERING  
BEFORE THE HOUSE COMMITTEE CPC  
ON WEDNESDAY, FEBRUARY 27, 2008

Chair Herkes, Vice-Chair McKelvey, and members of the committee.

My name is Gwen Rose, and I represent The Vote Solar Initiative, a nonprofit organization with members throughout Hawaii and the U.S. that aims to address global warming and energy independence by bringing solar energy into the mainstream. Our organization has been an active stakeholder in the development of net metering rules in many states throughout the country.

Net metered renewable energy systems provide quantifiable benefits to Hawaii's ratepayers and utilities. One of its key benefits rests in its ability to avoid consumption of oil for power generation. The cost of purchasing power and fuel can comprise as much as 60 – 80% of the overall retail rate. The cost of fuel is passed through to the ratepayer under the Energy Cost Adjustment Clause (ECAC), which means the ratepayer entirely absorbs the risk. Hawaii has the highest and most fluctuating rates in the nation. Further, there is substantial evidence suggesting that the value derived renewable energy production – in terms of job creation and environmental benefits – is at least equivalent to the retail rate of energy, and potentially much greater. For these reasons, Hawaii should seek to accelerate the amount of net metered renewable energy through HB2550.

We do recommend changes to HB2550 H.D. 1, including modified language from the original bill, in order to expand and improve access to net metering for all customer types. The Vote Solar Initiative recommends the following amendments:

1. Remove limits to residential and small commercial systems <10 kilowatts. Net metering is critical to residential customers participation in solar markets and this provision would eliminate the concern that they may lose access in the event large commercial-sized customers participate. There are at least ten states in the U.S. that have no enrollment caps for residential/small commercial systems.

2. Increase the amount of capacity that larger net metered systems can add to the grid. We recommend incrementally increasing the enrollment cap for systems  $\geq 10\text{kW}$  from 0.5% of peak demand up to 5% by 2010. Artificially low caps will seriously undermine the renewable distributed generation market in Hawaii at a time when oil

has reached above \$100 per barrel and the state needs to encourage more, not less, solar capacity.

The expected cost associated with raising the net metering cap – absent any consideration of the *benefits* provided by net metering renewable energy systems – would nevertheless be quite small. Analysis done by Vote Solar on the ratepayer impact of reaching a 5% cap in 15 years (an aggressive assumption) indicates that the cost would be de minimus: less than one-quarter of 1% for Oahu and less than one-third of 1% for the Big Island on annual energy costs. This will be far outweighed by rate increases resulting from oil prices.

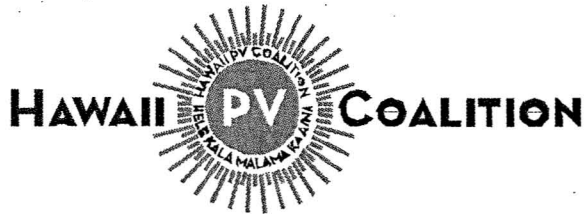
3. Allow larger customers (e.g. schools, big box retailers) to access net metering. We recommend incrementally increasing the cap for larger systems up to 1 Megawatt. Commercial customers should be allowed to offset or zero out energy usage in order to help control their facility's energy cost; to do this, customers need to be able to size their systems according to their load, demand and available roof space.

4. Base future modifications on an independent evaluation of costs and benefits. The historic reason for enrollment caps of any kind had to do with arguments of cross-subsidization. A balanced analysis of net metering should weigh both the costs *and* benefits. We recommend that any future modifications be done through the PUC based independent evaluation of the costs and benefits to participants and non-participants of net metered renewable energy systems, similar to what is being required by the California Public Utilities Commission under the Million Solar Roofs law.

As states have gained experience with net metering policies, there has been a trend toward expanding access for larger system sizes and removing limitations on total customer enrollment. From 2006 - 2007, 7 states and 1 U.S. territory upgraded their net metering policies, allowing 1 – 2 MW systems to participate, and entirely removing caps to the number of customers enrolled, including Puerto Rico, Florida, Maryland, Connecticut, Oregon, New Mexico, and Pennsylvania.

In particular, these amendments are important for ensuring continued, smooth growth and diversity for the renewables market in Hawaii.

Thank you for the opportunity to submit testimony.



TESTIMONY OF THE SOLAR ALLIANCE AND THE HAWAII PV COALITION  
IN REGARD  
HB 2550, HD1 RELATING TO PUBLIC UTILITIES  
BEFORE THE  
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE  
ON  
WEDNESDAY, FEBRUARY 27, 2008 AT 2:00PM

Chair Herkes, Vice-Chair McKelvey, and Members of the Committee.

The Hawaii PV Coalition is a non-profit organization that represents installers, suppliers, manufacturers and customers of solar electric systems in the state of Hawaii.<sup>1</sup> The Solar Alliance is a state-focused alliance of solar manufacturers, integrators and financiers dedicated to accelerating the promise of photovoltaic (PV) energy in the United States.<sup>2</sup>

The Hawaii PV Coalition and the Solar Alliance supports expanding net metering in Hawaii. We believe by broadening net metering in Hawaii and in conjunction with the current tax credits, Hawaii can reduce dependence on imported energy, create fixed cost reliable energy, and eventually reduce the cost of electricity for the ratepayers. Additionally, expanding net metering will facilitate Hawaiian ability to use its local natural and human resources instead of forcing Hawaiians to buy outside resources.

Net metering allows consumers who generate renewable energy to give the energy back to the grid and get credit for this energy and use this credit later.

We ask the Committee to modify the current legislation by:

- Eliminating the enrollment cap for systems under 10kW (for home and small businesses);
- Increasing the system size to 250kW then incrementally to 1 MW in 2010 (for schools, government buildings, and large businesses);
- Increasing the enrollment cap for systems above 10kW incrementally until reaching 5% in 2010;
- Giving Public Utilities Commission (PUC) authority to modify net metering limits if needed based on an evaluation of costs/benefits of net metering for participating and nonparticipating customers; and

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<sup>1</sup> The Hawaii PV Coalition, <http://www.hawaiipvcoalition.org/>

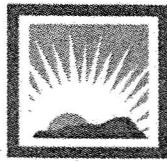
<sup>2</sup> The Solar Alliance, <http://solaralliance.org/>

- Removing avoided cost payments.

Currently, net metering is capped at 0.05% and 50kW. We believe it is important to increase this rate to allow Hawaiians to use their own natural resources. We believe the stability and reliability of the grid is also extremely important, this is why we suggest allowing systems to incrementally increase in size and give the PUC the ability to modify net-metering based on independent evaluation and not a self interested entity. Additionally, the utilities always have the safety net of interconnection rules to insure a stable and reliable grid.

Expanding net metering will help Hawaii create fixed cost of energy, reducing the dependence of imported fuels, and expand the use of local natural and human resources, helping to create high-paying job opportunities for Hawaiians and turning its abundant sunshine into an energy source for Hawaii.

We would like to thank the Committee for the opportunity to submit testimony and for the Committee's consideration.



**Hawaii Solar Energy Association**  
*Serving Hawaii Since 1977*

TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION  
IN REGARD TO H.B. 2550, H.B. 1  
RELATING TO PUBLIC UTILITIES  
BEFORE THE  
HOUSE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION  
ON  
TUESDAY, FEBRUARY 27, 2008

Chair Herkes, Vice-Chair McKelvey and members of the committee, my name is Rick Reed and I represent the Hawaii Solar Energy Assn (HSEA). The HSEA is a professional trade association established in 1977, and affiliated with the Solar Energy Industries Association (SEIA) in Washington, D.C. HSEA represents manufacturers, distributors, contractors, financiers, and utility companies active in the solar energy industry in Hawaii. We support the intent of H.B. 3064, H.D. 1.

The PUC has the statutory authority to raise the current net-energy metering (NEM) limits by rule or order. The commission does not require our counsel to do so but, as a deliberative body, the commissioners traditionally seek to establish a strong evidentiary record based on extensive stakeholder input before issuing their decisions.

In 2006, the PUC opened Docket No. 21006-004 to explore whether or not to raise the capacity of eligible NEM customer generators above 50kW and, if so, to what level, and also to consider raising the percentage of eligible NEM systems above 0.5% of each individual utility company's peak electrical demand. The commission's ruling in this docket is imminent.

In the NEM Docket HSEA was most concerned with the fundamental issues of fairness and NEM access for all ratepayer categories. We proposed that systems 10kW and below be allowed on the grid without restriction. This completely eliminates the common fear that a few large commercial systems would dominate all the available bandwidth. HSEA also proposed that the percentage of generation cap be raised to 5%. Our analysis showed a very moderate rate impact at the time of between .40¢/ (Oahu) - 1.07¢ (Kauai) per month for "average" residential customers at the 5% cap level.

From HSEA's perspective the percentage of generation cap limitation is the key issue. If the cap is set high enough there is little chance in the near term that a few very large net-metered systems would close the door on other ratepayer classes that also are seeking an off-ramp from ever escalating electric rates. In short, neither the PUC nor the legislature should inadvertently create a situation where large and small system providers are constantly at war for their fair share of grid access. All ratepayers should have equal NEM access in a fair and proportionate manner.

H.B. 2550, H.D. 1 addresses the issue of fairness by requiring that a percentage of the total rated capacity of NEM systems be reserved for residential and small commercial customer generators. While we strongly support this concept, HSEA believes that a better approach is simply to allow residential and small commercial systems up to perhaps 30kw to interconnect without limitation, i.e. small systems should not be counted against any NEM cap levels established by the PUC.

Once the issue of grid access has been established in this manner, the commission's remaining work in regard to NEM systems is greatly simplified. It would be left to the commission to, 1) determine what cap levels, if any, should be applied to large commercial systems and, 2) to analyze the rate impact of all NEM systems at various cap levels. In regard to this later task, a good deal of excellent work has been done relative to NEM rate impacts.

There is a consensus in Hawaii that we must **greatly accelerate** the pace at which we use renewable energy resources to displace polluting fossil fuels to generate electricity. Our current NEM cap levels are still far too low to make much of a dent in this intractable problem.

Thank you for the opportunity to testify.



*HAWAII RENEWABLE ENERGY ALLIANCE*

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

HB 2550 HD1, RELATING TO PUBLIC UTILITIES

February 27, 2008

Chair Herkes, Vice-Chair McElvey and members of the Committee I am Warren Bollmeier, testifying on behalf of the Hawaii Renewable Energy Alliance (HREA). HREA is a nonprofit corporation in Hawaii, established in 1995 by a group of individuals and organizations concerned about the energy future of Hawaii. HREA's 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 HREA's goals is to support appropriate policy changes in state and local government, the Public Utilities Commission and the electric utilities to increase the use of renewables in Hawaii.

The purposes of HB 2550 HD1 are to: (1) require the public utilities commission to ensure that a percentage of the total rated generating capacity produced by eligible customer-generators be reserved for electricity produced by eligible residential or small commercial customer-generators, and (2) allows public utilities commission to define maximum capacity for eligible residential or small commercial customer-generators.

HREA supports the intent of this measure, but does not believe it is necessary for the following reasons.

1. Public Utility Commission Authority. The Legislature (Act 104 2005 Session) has given the Commission the authority to administer the Net Energy Metering law. We believe the proposed amendments to the Net Energy Metering law are covered by the Commission's authority;
2. Commission Docket No. 2006-0484. HREA is an Intervenor in Commission Docket No. 2006-0484 which was to investigate whether the system capacity limits and customer-generator size limits should be increased from the current 0.5% and 50 kW. After numerous meetings of the Parties and much discussion, the Parties prepared and signed a stipulation to modify the existing law by increasing the customer-generator size and system limits, and to consider further changes to the law within the individual utility Integrated Resource Planning ("IRP") processes. Specifically, the system limit would be increased to 1.0% statewide and the customer-generator limit to 100 kW for the HECO companies. To date, the Commission has not issued its Decision and Order on the proposed stipulation. Thus, we believe it is premature to consider other proposals to amend the law; and
3. Process Issues. HREA notes, should the Commission approve the stipulation, there will be annual reviews of the net metering programs at each utility as part of their IRP process, including consideration of amendments to the net metering law on an island-specific basis. We believe this process will allow adequate opportunity for interested parties to participate and will hopefully preclude the future need for hearings such as this.

Thank you for this opportunity to testify.

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