

SB 1675

**TESTIMONY OF CARLITO P. CALIBOSO
CHAIRMAN, PUBLIC UTILITIES COMMISSION
DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE
SENATE COMMITTEE ON ENERGY AND ENVIRONMENT
FEBRUARY 10, 2009**

MEASURE: S.B. No. 1675
TITLE: Relating to Renewable Energy

Chair Gabbard and Members of the Committee:

DESCRIPTION:

This bill includes various amendments related to net energy metering, by increasing the consumer capacity on net energy metering to not more than one megawatt; eliminating the total capacity limit on net metering, and permitting existing net metered customers to remain with the program if a feed-in tariff or other tariff structures are implemented. This bill also increases the size of systems that would be exempt from having to install additional controls or perform additional tests or purchase additional liability insurance and requires the Public Utilities Commission ("Commission") to initiate a rulemaking proceeding to adopt best practices interconnection standards for solar, wind turbine, biomass, or hydroelectric energy generating facilities, which shall be adopted no later than September 10, 2010.

POSITION:

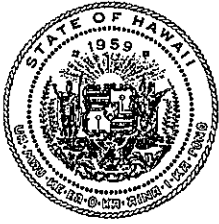
The Commission has concerns about this bill and offers the following comments.

COMMENTS:

- **The Commission has a docket currently pending related to net energy metering, Docket No. 2006-0084. Because the issues of the docket concern the cap for individual customer-generators and the total rated generating capacity produced by them, it would be inappropriate for the Commission to opine on the advisability of adjusting these amounts as proposed in the bill.**
- The Commission respectfully submits that this bill would arbitrarily increase the net energy metering caps without an extensive examination process, similar to that conducted in Docket No. 2006-0084.

- The parties to the docket have been ordered to submit a stipulated proposed plan to address the HECO Companies' and the Consumer Advocate's NEM agreement, as set forth in the Hawaii Clean Energy Agreement, a comprehensive agreement designed to move the State away from its dependence on imported fossil fuels for electricity and ground transportation
- The HECO Companies and the parties will be filing an update on the proposed NEM Pilot Programs which were designed to evaluate the effect of further increasing the NEM unit size limits beyond what was established in the docket. The pilot programs should be designed to provide sufficient economic incentives to encourage participation, while identifying any safeguards necessary to assure the safety, reliability and power quality of the utility system.
- In addition, the parties shall inform the commission of any new review process for considering any future increases to the NEM limits for the HECO Companies.
- **With respect to proposed new Section 269-111(d), requiring the Commission to adopt best practices interconnection standards through rulemaking, the Commission questions the need for this language as it has already reviewed and approved net energy metering tariffs of the electric utilities that include interconnection standards or requirements. Accordingly, this added provision may not be necessary.**
- **Finally, the Commission opened a docket in October 2008 to investigate Feed-In Tariffs ("FIT"). During this proceeding, the Commission plans to, among other things, evaluate the roles of other methodologies (i.e. NEM, power purchase agreements, competitive bidding, avoided cost offerings), etc.) for a utility to acquire renewable energy, with or without FIT.**

Thank you for the opportunity to testify.



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

LINDA LINGLE
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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 10, 2009
3:45 p.m.

State Capitol, Conference Room 225
in consideration of
SB 1675

RELATING TO RENEWABLE ENERGY.

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

The Department of Business, Economic Development, and
Tourism (DBEDT) generally supports SB 1675 which amends several
provisions of the Net Energy Metering statute (NEM), Section 269-
101 through Section 269-111, Hawaii Revised Statute (HRS). DBEDT
also offers some recommendations to further enhance the NEM's
effectiveness in promoting customer-sited renewable energy
resources and technologies and help Hawaii's transformation to a
clean energy future with its attendant economic and environmental
benefits. The significant increases in the number of net energy
metered customers across all islands since 2001 when NEM first
became a law, is evidence that NEM is an effective incentive for
the rapid development of customer-sited renewable resource
generation.

SB 1675 amends Section 269-101 to increase the maximum capacity of eligible customer-generator to one megawatt. While DBEDT supports the intent of this change, we believe that authorizing the Public Utilities Commission to remove the cap on the size of the eligible customer-generator and to replace it with a limit on a per-circuit basis for some utilities such as that provided in the Hawaii Clean Energy Initiative electric generation and delivery bill, Senate Bill 870, will provide a stronger mandate that will encourage and promote customer-sited renewable energy resources and technologies.

DBEDT strongly supports the elimination of the limit to the total generating capacity produced by eligible customer-generators in Section 269-102.

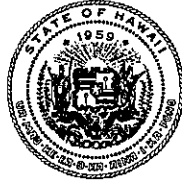
DBEDT also strongly supports SB 1675's amendment to Section 269-110 allowing eligible customer-generators with existing net energy metering contracts to have the option of maintaining these contracts in the event that the Public Utilities Commission adopts and implements alternative compensation mechanisms such as feed-in tariffs for power (kilowatthours) exported to the utility grid by the eligible customer generators.

While DBEDT supports the intent of the bill's amendment to Section 269-106(b) requiring that the utility compensate the eligible customer-generators for the excess kilowatt-hours for the prior 12-months that remain unused, we would caution that this requirement could have unintended consequences that could

impact the utility as well as the other ratepayers, especially with the proposed increase or elimination of the capacity size of eligible customer-generators. It should be noted that net energy metering is intended primarily to offset part or all of the customer's own electrical requirements, rather than to promote power sales to the utility. We therefore recommend that this amendment be deleted or changed to give the public utilities commission the authority to determine whether or not, and how, to compensate the eligible customer-generators for the excess unused power for the prior 12-months.

With regards to SB 1675's amendment to Section 269-111 relating to the interconnection standards, DBEDT would like to note that the utilities already have interconnection standards that have been approved by the Public Utilities Commission. DBEDT would instead suggest that the Public Utilities Commission re-evaluate these existing interconnections standards and, more importantly, the utility process and procedures for implementing these standards to ensure more transparency and expeditious processing of net energy metering applications.

Thank you for the opportunity to offer these comments.



LINDA LINGLE
GOVERNOR
JAMES R. AIONA, JR.
LT. GOVERNOR

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LAWRENCE M. REIFURTH
DIRECTOR
RONALD BOYER
DEPUTY DIRECTOR

TO THE SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

THE TWENTY-FIFTH LEGISLATURE
REGULAR SESSION OF 2009

TUESDAY, FEBRUARY 10, 2009
3:45 P.M.

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

SENATE BILL NO. 1675 – RELATING TO RENEWABLE ENERGY.

DESCRIPTION:

This measure: (1) Removes the capacity limit for net energy metering (NEM); (2) Increases eligible customer-generator capacity to one megawatt; (3) Permits existing net metered customers to remain with net metering program once alternative credits or compensation mechanisms are created; and (4) Allows an eligible customer-generator to generate up to one hundred kilowatts before the eligible customer-generator must seek public utilities commission approval of safety and performance standards.

POSITION:

The Division of Consumer Advocacy ("Consumer Advocate") supports the intent of the measure, and offers the following comments for the Committee's consideration.

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.

For the HECO Companies, the Consumer Advocate prefers the methodology set forth in the Hawaii Clean Energy Initiative agreement ("HCEI Agreement"), wherein the parties agreed that there should be no system-wide caps on net energy metering at any of the Hawaiian Electric utilities. Instead, the parties agreed to the following:

- Distributed generation (DG) interconnection will be limited on a per-circuit basis, where generation (including photovoltaic (PV), micro wind, internal combustion engines, and net metered generation) feeding into the circuit shall be limited to no more than 15% of peak circuit demand for all distribution-level circuits of 12kV or lower;
- New DG requests shall be processed and interconnected on a first-come, first-served basis unless the Public Utilities Commission (Commission) specifies some other method;
- For those circuits where interconnection requests (particularly for PV) approach the 15% limit, the utility will perform and complete within 60 days after receipt of an interconnection request, a circuit-specific analysis to determine whether the limit can be increased. For non inverter-based DGs, the analysis to determine whether the limit can be increased will be performed on a case-by-case basis based on the specifics of the DG project(s) proposed;
- If the utility believes a specific DG installation poses a significant risk to circuit reliability and safety or grid stability, it will notify the applicant, the Consumer Advocate and the Commission, within 30 days of receipt of the completion of a circuit analysis and the identification of the need to defer the installation until further analysis can be conducted, and shall conduct that analysis within three months of the date of the application request;
- The parties agreed that NEM will be replaced with an appropriate feed-in tariff and new net metered installations shall be required to incorporate time-of-use metering equipment and, when time-of-use rates are implemented on a full scale basis in Hawaii or the applicable area, the net metered customer shall move to time-of-use net metering and sale of excess energy.

For net energy metering limitations as they apply to Kauai Island Utility Cooperative ("KIUC"), it would appear reasonable to defer to the process established in statute wherein the Commission may adjust the various net energy metering limits.

Thank you for this opportunity to testify.

**Testimony before the
Senate Committee on**

Energy and Environment

S.B. 1675 -- Relating to Renewable Energy

**Tuesday, February 10, 2009
3:45 pm, Conference Room 225**

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

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

My name is Arthur Seki. I am the Director of Technology for 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). We recognize the Legislature's strong interest in seeing more renewable energy development in the State and are committed not only to supporting renewable energy development but also to conservation and energy efficiency practices to reduce the State's dependence on oil.

We have previously testified in support of a net energy metering (NEM) bills that resulted in:

- Act 272, 2001--led to the state's first NEM law;
- Act 99, 2004--increased the cap from 10 kW to 50 kW
- Act 69, 2005—allowed PUC review and
- Act 104, 2005--allowed the PUC to increase the qualifying system size or enrollment limit by rule or order.

Since the PUC can make modifications to the NEM tariff, by rule or order, we do not think this bill is needed.

The PUC approved changes to NEM in 2008 (Docket No. 2006-0084):

- Increased the maximum size of the eligible customer-generator that can qualify for a NEM agreement from 50 kW to 100 kW;

- Increased the total rated generating capacity produced by eligible customer-generators from 0.5% to 1.0% of the utility's system peak demand;
- Reserved 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);
- Utilized the Integrated Resource Planning (IRP) process to evaluate impact to the utilities' systems and determine further adjustments to the NEM system size and cap limits (limits are re-examined on an annual basis).

With the tremendous growth in NEM activity which was approaching the system cap, the PUC has recently approved:

- Increasing the total rated generating capacity produced by eligible customer-generators from 1.0% to 3.0% of the utility's system peak demand for HELCO and MECO;
- Updating the percentage to 40%, and 40% of the total rated generating capacity produced by eligible customer-generators for HELCO, and MECO, respectively, for residential and smaller commercial NEM customers (system sizes of 10 kW or less).

Thus since the PUC can make modifications to the NEM tariff, by rule or order, and has done so in recent dockets or proceedings, we ask that you defer this bill.

Thank you for the opportunity to testify.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Feb. 12, 2009
Room 225
3:45 P.M

Senate
Committee on Energy and Environment
SB1675

Mark Duda
President

Testimony in Strong Support

Chair Gabbard, Vice Chair English and Members of the Committees:

Basis for Testimony

HSEA's member companies are well placed to comment on this particular measure because they install the majority of net-metered PV systems on Oahu, Hawaii Island, and Maui. In addition, HSEA has intervened in the net energy metering (NEM) docket and has also worked closely with the HECO Companies throughout 2008 to raise system wide NEM caps from 1% to 3% for MECO and HELCO. HSEA is also intervening in several related dockets, including the feed-in tariff docket, which is perhaps most closely related to NEM and in which the elimination of NEM has been proposed and discussed. (HSEA strongly opposes eliminating NEM.)

HSEA makes the following comments regarding this measure:

HSEA strongly supports SB1675. This bill is wholly in keeping with the public interest and it will accelerate the penetration of renewable energy in Hawaii. The bill has three key provisions:

1. It eliminates the 'system wide' or 'demand share' caps that are currently 1% for KIUC and HECO, and 3% for MECO and HELCO. It is important to note that this does not subject these grids to stability or reliability issues because the utility always controls a customer-generator's ability to interconnect a system to the grid. If interconnecting a particular system poses problems to the grid, the utility may prevent it from being connected until appropriate safeguards are in place.
2. It raises the NEM system size cap from 100 kW to 1 MW. Because NEM customers are not allowed to profit by making excess energy (any excess at the end of the year is simply given to the utility) this provision does not represent a fundamental rules change. Rather, it serves only to allow commercial customers with larger energy bills to invest in renewable energy systems to reduce their electrical load in the same way smaller commercial customers currently are able to do. Raising this cap will substantially accelerate the adoption of renewable energy in Hawaii by providing an incentive for larger power users to invest in renewable energy system.

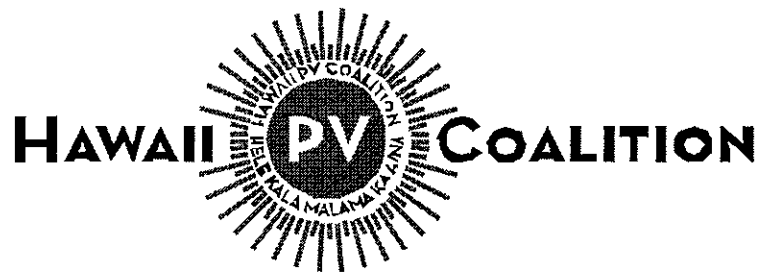
3. It ensures that customer-generators under net metering contracts will never be switched against their will to other tariffs against their will. This is important because a number of additional tariff regimes are being proposed that could alter the financial performance of investments in net-metered renewable energy systems. These include the feed-in tariff and time-of-use rates.

HSEA's position on NEM in general is that customers should always have NEM as an option (up the point where interconnecting additional systems can be shown to destabilize the utility grid). When NEM without artificial restrictive caps is in place, power users have a substantial incentive to install more generating equipment than they need to merely offset their instantaneous daytime usage. By making NEM available to more customers through expansion of both the system-wide and system size caps, SB1675 will induce more firms to install renewable energy systems and reduce their demands on the power grid. This is an important step that will help enable the state to reach its ambitious clean energy goals.

Finally, please note that HSEA does not feel it is necessary to compensate customer-generators for annual excess production at the retail rate. HSEA instead recommends that the original language of the §269-106 (b) be retained.

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.



Feb. 12, 2009
Room 225
3:45 P.M

Senate
Committee on Energy and Environment
SB1675

Brad Albert
President

Testimony in Support with Changes

To: Chair Gabbard, Vice Chair English and Members of the Committees:

Basis for Testimony

HPVC's member companies are well placed to comment on this particular measure because they install the majority of net-metered PV systems on Oahu, Hawaii Island, and Maui. In addition, HPVC has been a member of the IRP advisory committee for MECO and HELCO regarding the increase in the net energy metering (NEM) caps from 1% to 3% this past year. In addition the HPVC has done extensive community outreach to educate the public about NEM and PV systems as well as other solar technologies and energy efficiency. Many of our individual members are NEM system owners.

HPVC makes the following comments regarding this measure:

HPVC supports SB1675. This bill is wholly in keeping with the public interest and it will accelerate the penetration of renewable energy in Hawaii. The bill has four key provisions:

1. It eliminates the 'system wide' or 'demand share' caps that are currently 1% for KIUC and HECO, and 3% for MECO and HELCO. It is important to note that this does not subject these grids to stability or reliability issues because the utility always controls a customer-generator's ability to interconnect a system to the grid. If interconnecting a particular system poses problems to the grid, the utility may prevent it from being connected until appropriate safeguards are in place.

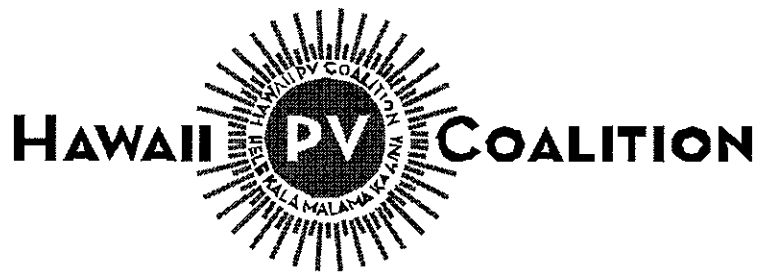
Currently the concept of a limit on the number of NEM systems is a roadblock to developers and investors as there is uncertainty that NEM share will be available. In addition our member companies are never certain that they will be able to continue selling systems as evidenced on Kauai where NEM limits were reached last year and not raised. In fact on Maui the cap was raised from 1% to 3% on Dec 26th 2008 less than one month from when the cap would have been reached. This type of uncertainty is counter the states goals of encouraging the adoption of renewable energy. Ultimately

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Mary Kawena Pukui

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Hawaii should be sending a message not to limit the # of systems but a target a meaningful amount or unlimited number of systems.

2. It raises the NEM system size cap from 100 kW to 1 MW. ***We believe that this cap should be raised, but we recommend 500kW (larger systems would fall into a feed in tariff or other rate structure).*** Raising this cap will substantially accelerate the adoption of renewable energy in Hawaii by providing an incentive for larger power users to invest in renewable energy system.
3. It ensures that customer-generators under net metering contracts will never be switched against their will to other tariffs against their will. This is important because a number of additional tariff regimes are being proposed that could alter the financial performance of investments in net-metered renewable energy systems. These include the feed-in tariff and time-of-use rates.
4. It compensates the NEM customer generator for excess power generation at the end of a 12 month period. This provision should be made retroactive to all current NEM customers as well as new NEM customers. We agree that the customer be compensated, ***but we believe that the rate should not be at the retail rate, but a lower rate comparable to other power purchase agreements or feed in tariffs.*** This would encourage customers to offset 100% of their power knowing that they would receive some form of compensation where they to overproduce, yet not encouraging them to purposefully oversize their system. This provision encourages NEM customers to install larger systems meeting the Hawaii's goal of more non-imported renewable energy.

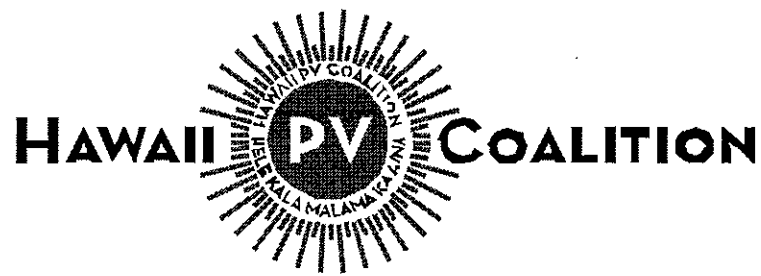
HPVC's position on NEM in general is that customers should always have NEM as an option (up the point where interconnecting additional systems can be shown to destabilize the utility grid). When NEM without artificial restrictive caps is in place, power users have a substantial incentive to install more generating equipment than they need to merely offset their instantaneous daytime usage. By making NEM available to more customers through expansion of both the system-wide and system size caps, SB1675 will induce more firms to install renewable energy systems and reduce their demands on the power grid. This is an important step that will help enable the state to reach its ambitious clean energy goals.

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About the Hawaii PV Coalition

Hawaii PV Coalition (HPVC) was founded in 2006 and is comprised of more than 30 installers, distributors, manufacturers and financers of Photovoltaic (PV) NEM systems, many of which are Hawaii based, owned and operated. The Hawaii PV Coalition also has non-industry businesses and homeowners who are support solar as members. HPVC was formed to actively promote the solar electric agenda across our islands. Working with legislators, government agencies, utility companies, and public interest groups, the Coalition is pushing to make Hawaii more energy independent while creating more jobs in the renewable energy sector.

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SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 10, 2008, 3:45 P.M.

Room 225

(Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF SB 1675

Chair Gabbard and members of the committee:

The Blue Planet Foundation supports Senate Bill 1675, expanding Hawaii's successful and popular net energy metering law to foster more home-grown, clean energy.

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 has dramatically increased. In fact, we may be nearing a "tipping point" where many residential customers invest in renewable energy devices because of their relative cost (see image on the second page of this testimony) and environmental advantages.

Senate Bill 1675 picks up where prior legislation left off—increasing the total amount of net metered energy on the grid. This measure accomplishes the following:

- Eliminates the system cap, allowing more customers to plug in to the grid and run their meters backward.
- Increases the allowable system size on the grid from 100kW to 1 MW, allowing larger systems to net meter. This is similar to what California and other states have enacted. Similarly, Arizona has no system size caps, but they limit the size to 125% of customer's total connected electric load. This ensures that customers don't purposely oversize their systems and take advantage of net energy metering instead of becoming independent power producers.
- Clarifies that net metering benefits will continue.

The benefits of expanding net energy metering are numerous:

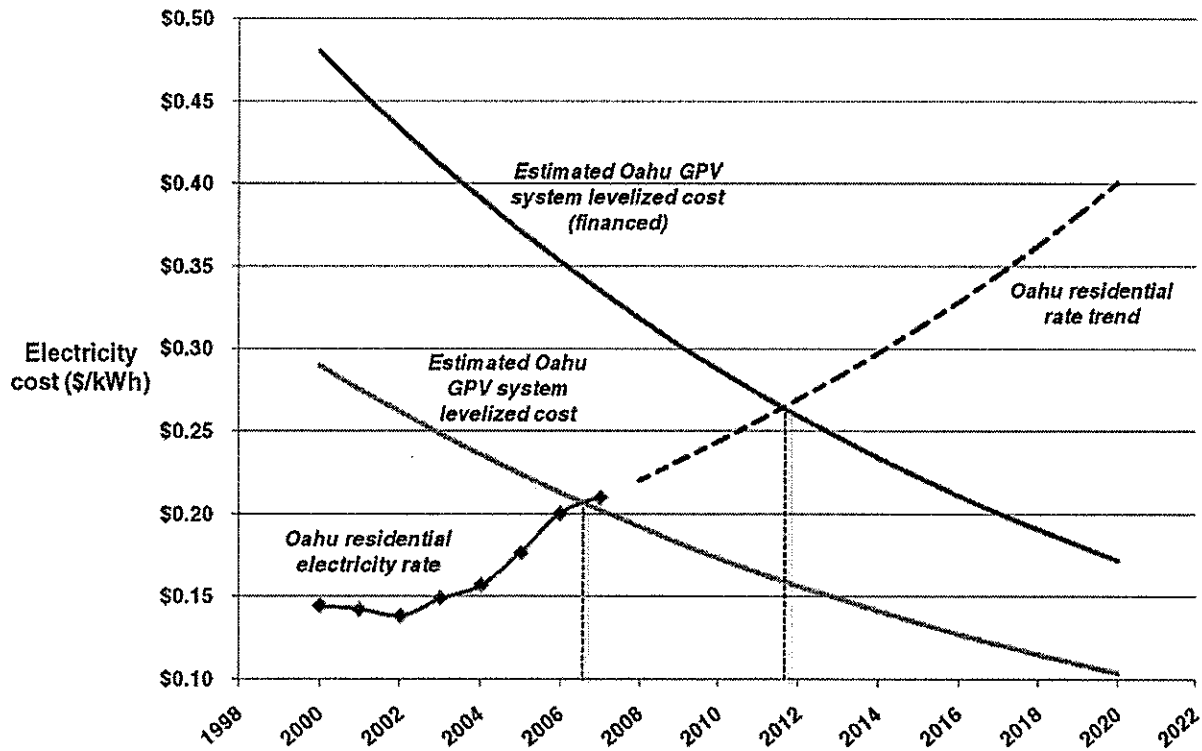
- Private individuals invest in the power plants of tomorrow—instead of ratepayers. Each new installed system can reduce the need to construct massive, expensive power plants, with all of their associated siting, environmental, and financial impacts. Private

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 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 fossil fuel-fired powerplants. We should ensure that it is given at least as much value on the market.

Senate Bill 1675 will help accelerate the adoption of photovoltaic and other clean energy devices by increasing the availability of net energy metering in Hawai'i.

Thank you for the opportunity to testify.



Estimated cost trends of grid electricity versus residential photovoltaic electricity over time

SUNPOWER

Room # 225

3:45 PM

February 10, 2009

Senate Committee on Energy and Environment

SB1675

RELATING TO RENEWABLE ENERGY

Chair Gabbard, Vice-Chair English and Committee Members:

Introduction: My name is Riley Saito Senior Manager, Hawaii Projects for the SunPower Systems Corporation. Thank you in advance for accepting these few comments on **SB1675**.

SunPower Systems Corporation ("SunPower") has been a member of the Hawaii Energy Policy Forum since it convened in 2003. SunPower is in the business of designing, manufacturing, and delivering the highest efficiency solar electric technology worldwide. One of our latest projects was the 1.2 megawatt La Ola solar farm on Lanai with Castle & Cooke Hawaii. SunPower is also a member of the Solar Alliance which is an intervenor in the Feed-in Docket Investigation at the Hawaii Public Utilities Commission. In the Feed-in Docket some parties have proposed the elimination of net metering ("NEM"). SunPower strongly opposes the elimination of net metering.

SunPower strongly supports SB1675. This bill is wholly in keeping with the public interest and it will accelerate the penetration of renewable energy in Hawaii. The bill has three key provisions:

1. It eliminates the 'system wide' or 'demand share' caps that are currently 1% for KIUC and HECO, and 3% for MECO and HELCO. It is important to note that this does not subject these grids to stability or reliability issues because the utility always controls a customer-generator's ability to interconnect a system to the grid. If interconnecting a particular system poses problems to the grid, the utility may prevent it from being connected until appropriate safeguards are in place.
2. It raises the NEM system size cap from 100 kW to 1 MW. Because NEM customers are not allowed to profit by making excess energy (any excess at the end of the year is simply given to the utility) this provision does not represent a fundamental rules change. Rather, it serves only to allow commercial customers with larger energy bills to invest in renewable energy systems to reduce their electrical load in the same way smaller commercial customers currently are able to do. Raising this cap will substantially accelerate the adoption of renewable energy in Hawaii by providing an incentive for larger power users to invest in renewable energy system.
3. It ensures that customer-generators under net metering contracts will never be switched against their will to other tariffs against their will. This is important because a number of additional tariff regimes are being proposed that could alter the financial performance of investments in net-metered renewable energy systems. These include the feed-in tariff and time-of-use rates.

SUNPOWER

SunPower's position on NEM is that customers should always have NEM as an option (up the point where interconnecting additional systems can be shown to destabilize the utility grid). When NEM without artificial restrictive caps is in place, power users have a substantial incentive to install more generating equipment than they need to merely offset their instantaneous daytime usage. By making NEM available to more customers through expansion of both the system-wide and system size caps, SB1675 will induce more firms to install renewable energy systems and reduce their demands on the power grid. This is an important step that will help enable the state to reach its ambitious clean energy goals.

Mahalo for the opportunity to submit testimony.

**DOWLING
COMPANY, INC**

Room # 225 3:45 PM February 10, 2009

SB1675 RELATING TO RENEWABLE ENERGY

Chair Gabbard, Vice-Chair English and Committee Members:

My name is Jennifer Stites and I am the Green Development Manager for Dowling Company, Inc. ("DCI"). DCI is a Maui-based real estate development company that is committed to sustainable development. To guide this effort and determine our performance metrics, we have adopted the nationally recognized U.S. Green Building Council's ("USGBC") Leadership in Energy and Environmental Design ("LEED") rating system. We are especially proud and excited that DCI's first USGBC LEED certified project is our own office located in Wailuku, Maui. Our office was also the first USGBC LEED certified office on Maui.

DCI supports SB1675. This bill is wholly in keeping with the public interest and it will accelerate the penetration of renewable energy in Hawaii. The bill has three key provisions:

1. It eliminates the 'system wide' or 'demand share' caps that are currently 1% for KIUC and HECO, and 3% for MECO and HELCO. It is important to note that this does not subject these grids to stability or reliability issues because the utility always controls a customer-generator's ability to interconnect a system to the grid. If interconnecting a particular system poses problems to the grid, the utility may prevent it from being connected until appropriate safeguards are in place.
2. It raises the NEM system size cap from 100 kW to 1 MW. Because NEM customers are not allowed to profit by making excess energy (any excess at the end of the year is simply given to the utility) this provision does not represent a fundamental rules change. Rather, it serves only to allow commercial customers with larger energy bills to invest in renewable energy systems to reduce their electrical load in the same way smaller commercial customers currently are able to do. Raising this cap will substantially accelerate the adoption of renewable energy in Hawaii by providing an incentive for larger power users to invest in renewable energy system.
3. It ensures that customer-generators under net metering contracts will never be switched against their will to other tariffs against their will. This is

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important because a number of additional tariff regimes are being proposed that could alter the financial performance of investments in net-metered renewable energy systems. These include the feed-in tariff and time-of-use rates.

DCI's position on NEM is that customers should always have NEM as an option (up the point where interconnecting additional systems can be shown to destabilize the utility grid). When NEM without artificial restrictive caps is in place, power users have a substantial incentive to install more generating equipment than they need to merely offset their instantaneous daytime usage. By making NEM available to more customers through expansion of both the system-wide and system size caps, SB1675 will induce more firms to install renewable energy systems and reduce their demands on the power grid. This is an important step that will help enable the state to reach its ambitious clean energy goals.

Thank you for the opportunity to submit testimony.



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SENATE COMMITTEE ON ENERGY AND ENVIRONMENT

February 10, 2009, 3:45 P.M.
(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 1675

Chair Gabbard and members of the Committee:

The Sierra Club, Hawai'i Chapter, with nearly 5500 dues paying members statewide, supports SB 1675, removing the capacity limit for net energy metering. This bill furthers the policy preference for renewable energy and encourages "mom and pop" stores to invest in our future.

By allowing net energy customers to increase the amount of energy put back into the grid, this bill allows commercial entities to participate in "spinning down" their meter. Currently, the net metering standards are set primarily for smaller power users (such as residential units). A larger commercial entity was limited on how much energy it could provide to its utility (and correspondingly reduce its bill). This small change could have a large impact on the adoption of renewable energy by providing an incentive for larger power users to invest in PV or wind systems.

Thank you for the opportunity to testify.