



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
OFFICE OF THE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

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Testimony of the Department of Commerce and Consumer Affairs

**Before the
House Committee on Energy & Environmental Protection
Tuesday, January 30, 2024
9:00 a.m.
Conference Room 325**

**On the following measure:
H.B. 1687, RELATING TO ENERGY RESILIENCY**

Chair Lowen and Members of the Committee:

My name is Michael Angelo, and I am the Executive Director of the Department of Commerce and Consumer Affairs' (Department) Division of Consumer Advocacy. The Department offers comments on this bill.

The purpose of this bill is to require retail crediting for energy exports enrolled in grid services programs, whereby energy exported to the electrical grid past a participating customer-generator's point of common coupling from photovoltaic solar systems paired with battery storage as part of a utility-controlled grid service program would be credited at the full retail rate of electricity for the relevant time period.

The Department supports the deployment of customer sited solar and storage as technologies that can provide services that help support grid reliability, deliver generation from a resource that is aligned with the State's clean energy and climate goals, and help homes and businesses be resilient during hazardous events.

The Department also supports utility customers with solar and energy storage technology deployed receiving credits for exports of energy and compensation for grid services at amounts that represent the value to the grid at the time of delivery. This is critical to not further increase the energy burden on customers that cannot utilize solar and energy storage, which are often low- to moderate-income (LMI) customers.

Electricity rates have embedded costs for things that all customers rely on such as grid infrastructure. Allowing retail rate crediting for exports would allow customers with solar and battery storage to avoid paying their fair share of those costs. LMI customers and other non-participating customers would then shoulder that burden. Those that can afford solar and battery storage receive the additional benefit of being able to rely on the grid to meet their electricity needs that are not served by their system.

The Department notes that the Public Utilities Commission (Commission) recently approved the Smart Distributed Energy Resources (DER) Tariff, as the new tariff for interconnecting DER technologies such as solar plus battery storage systems. The Smart DER Tariff provides rates for export credits based on the time of day that energy is delivered to the grid. The Commission also established the Bring Your Own Device (BYOD) Tariff which includes upfront and on-going compensation for capacity and ancillary services for DER technologies. Under the BYOD Tariff, customers receive the highest export credit rate when the utility exports energy from the customer's system to provide grid services, regardless of the time of day at which the export occurs.

The above tariffs do not contemplate compensation for resiliency. The Department offers that the impact of compensating customer sited solar and battery storage for resiliency would be best considered as part of a holistic assessment of the resilience of the electrical grid to natural hazards and should contemplate the benefit to all customers. We feel that the non-docketed proceeding opened by the Commission requiring all publicly regulated utilities to file their hazard mitigation plans will present an opportunity for such an assessment.

Thank you for the opportunity to testify on this bill.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, January 30, 2024
9:00 AM
State Capitol, Conference Room 325 and Videoconference

Providing Comments on
HB 1687

RELATING TO ENERGY RESILIENCY.

Chair Lowen, Vice Chair Cochran, and members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on HB 1687, which proposes crediting energy exported to the electrical grid by photovoltaic solar systems with battery storage at the "full retail rate of electricity for the relevant time period."

This is an important and timely topic. Hawai'i's successful use of rooftops for electricity generation – and successful siting of energy storage systems throughout Hawai'i's communities, providing energy resilience for individuals and communities – will need to continue in order for Hawaii to meet its energy goals.

However, there is great concern within Hawai'i's solar industry regarding tariff changes scheduled to take effect in Hawai'i this year. Hawai'i's previous experience with the ending of the Net Energy Metering program in October of 2015, and California's current situation, both provide cautionary tales about policy changes causing disruptions to an industry and the workers within it.

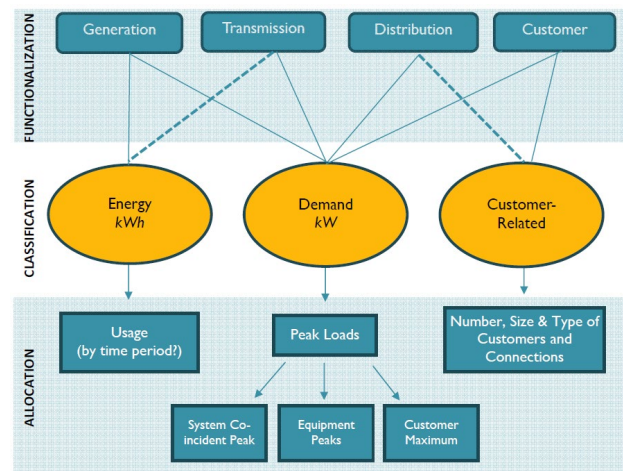
This bill – and the discussions, creative solutions, and hopefully greater understanding – may enable a public conversation about Hawaii's energy potential, capacity, needs, and options that will be enlightening and productive.

One of the concerns heard most often by HSEO from members of the public is regarding the affordability of energy. Hawai'i's electricity prices are significantly higher than the U.S. average, largely because Hawai'i depends on imported petroleum, one of the most expensive fuels for generating electricity.¹ Even though about a third of Hawai'i's electricity is generated from renewable sources, we are still using oil for about two-thirds of our electricity generation.²

As the use of lower-cost renewables³ increases, exposure to the expense of oil price volatility will be reduced, providing a level of cost stability for all electric utility customers. Meanwhile, the issue of high energy burden is very real to the many low-and moderate-income customers who are struggling to pay their bills every month.

Figure 1: Ratemaking Process

The determination of what are fair and effective prices and tariffs is a complex undertaking, as illustrated by one of the simpler fact sheets on the subject as seen in Figure 1.⁴ Considerations include fairly allocating costs and benefits based on predicted costs and benefits to the system, which change by the moment, and year, depending on electricity production, demand, and grid conditions; effects on non-participating customers; and overall grid impacts. HSEO emphasizes the ongoing evaluation of the value of grid services and cautions against endorsing prescriptive language that could lead to significant rate impacts for years.



HSEO recognizes the crucial role of customer-sited renewable energy generation in achieving the State's goal of 100% renewable energy generation while ensuring grid reliability and resilience. HSEO supports the expansion of customer-sited renewable

¹ Hawaii State Energy Office. *Annual Report, Fiscal Year 2023*. https://energy.hawaii.gov/wp-content/uploads/2024/01/HSEO_2023_Annual_Report.pdf#page=16

² Ibid, [page 18](#).

³ Ibid, [page 16](#).

⁴ The Ratemaking Process (fact sheet by Synapse Energy): <https://www.synapse-energy.com/sites/default/files/Ratemaking-Fundamentals-FactSheet.pdf>

energy generation and energy storage systems as customer-sited energy contributes both to system-wide energy generation and to individual resilience.

HSEO acknowledges the potential disparity in utility bills between those with photovoltaic systems and those without, recognizing that not all customers can participate in the market for customer-sited energy.

HSEO notes that electricity is purchased by electric utilities at varying rates, based on conditions, costs, and expectations at the time the contracts were put into place. For example, for FY 2023, purchased renewable energy rates on Oahu ranged from \$0.0769 per kilowatt-hour (kWh) to \$0.253 per kWh. The utility's "avoided costs" (essentially, fuel) averaged \$0.2156 on-peak and \$0.2410 off-peak over the year.⁵

Facility Name	Capacity (MW)	Facility Type	Average FY23 (\$ per kWh) ¹	Time of Production	Energy Source	End Date / Term
Feed-in Tariff	Varies	As Available	\$0.2302	Any	Solar	20 years
Kahuku Wind Power	30	As Available	\$0.2214	Any	Wind	3/22/2031
Kalaeloa Renewable Energy Park	5	As Available	\$0.2160	Any	Solar	11/22/2033
Kalaeloa Solar Two	5	As Available	\$0.2530	Any	Solar	12/31/2032
Kapolei Sustainable Energy Park	1	As Available	\$0.2360	Any	Solar	12/30/2031
Kawailoa Solar	49	As Available	\$0.1273	Any	Solar	11/20/2041
Kawailoa Wind	69	As Available	\$0.2359	Any	Wind	11/02/2032
Lanikuhana Solar	14.7	As Available	\$0.1305	Any	Solar	9/19/2041
Na Pua Makani	24	As Available	\$0.1413	Any	Wind	12/11/2040
Par Hawaii Refining LLC ³	18.5	As Available	\$0.2028	On Peak ²	Fossil	Year to year
			\$0.2429	Off Peak ²		
Waianae Solar	27.6	As Available	\$0.1450	Any	Solar	1/31/2039
Waipio PV	45.9	As Available	\$0.1218	Any	Solar	9/19/2041
H-POWER	68.5	Firm	\$0.1966	On Peak ²	Waste	4/2/2033
			\$0.1508	Off Peak ²		
Kalaeloa Partners ⁴	208	Firm	\$0.2328	Any	Fossil	12/31/2032
Mililani I Solar ⁵	39 MW	Renewable Dispatchable	\$0.0856	Any	Solar	7/31/2042
Waiawa Solar ⁵	36 MW	Renewable Dispatchable	\$0.0769	Any	Solar	1/31/2043
Avoided Energy Cost Rate (primarily low sulfur fuel oil and diesel fuel)			\$0.2156	On Peak ²	Fossil	None
			\$0.2410	Off Peak ²		

⁵ Based on table published by the Hawaii Public Utilities Commission. Annual Report, FY 2023. <https://puc.hawaii.gov/wp-content/uploads/2024/01/Final-PUC-Annual-Report-FY23-01.16.2024-v1.pdf#page=23> [IES, AES, and docket info removed from table]

¹ Based on 12-month averages of actual energy costs unless otherwise noted; does not include capacity payments (if applicable).
² “On peak” is from 7 AM to 9 PM. “Off peak” is from 9 PM to 7 AM.
³ Average Energy Price does not include reactive adjustment.
⁴ Energy Price is based on Kalaeloa Partners Energy Cost which includes Fuel, Nonfuel, and Additive components for the prior PPA, and Fuel and Variable O&M components for the Amended and Restated PPA. Prices of the Amended and Restated PPA effective as of 1/1/2023.
⁵ Energy Price is based on annual Net Energy Potential

The prices shown above, at which Hawaiian Electric purchases and generates electricity, directly affect the prices paid by customers on O’ahu for electricity. Requiring the utility to pay even higher prices for purchased power, will increase the electricity bills for all customers.

O’ahu’s residential retail electricity rates have several components,⁶ as shown below for O’ahu residential service, effective January, 2024.

SCHEDULE 'R' – RESIDENTIAL	EFFECTIVE RATES ¹
Customer charge, per customer per month	
Single phase service (1-phase)	\$ 13.93
Three phase service (3-phase)	\$ 24.82
Energy charge (added to customer charge) - per kWhr	
First 350 kWhr per month - per kWhr	\$ 0.392916
Next 850 kWhr per month - per kWhr	\$ 0.406884
All kWhr over 1,200 kWhr per month - per kWhr	\$ 0.429618
Minimum charge, per customer per month - 1-phase	\$ 30.27
Minimum charge, per customer per month - 3-phase	\$ 35.72
Green Infrastructure Fee, per customer, per month - Add to all bills	\$ 1.47
¹ Effective rates are the base rates adjusted for applicable surcharges & adjustments. Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.	

HB 1687 uses the term “full retail rate” (page 5, line 4), but fails to define it. Without a definition, this term is ambiguous. However, for the purposes of discussion, assume the term refers to the “first 350 kWhr per month” in the table above. That rate, \$0.392916 per kWh, is higher than any of the purchased power rates in FY 2023 and **five times** the price paid for the renewable dispatchable power from the lowest cost resource on the list. In addition, HB 1687 goes on to propose that in addition to the

⁶ Hawaiian Electric Company, 01/01/24 effective rates (Oahu).
https://www.hawaiianelectric.com/documents/billing_and_payment/rates/effective_rate_summary/efs_2024_01.pdf

retail credit, compensation values are to be determined for resiliency, capacity, and ancillary services.

This would lead to a substantial increase in purchased power costs, while simultaneously allowing more customers to avoid payment, resulting in substantial cost and equity concerns.

Therefore, we have concerns with the bill as written but do appreciate the opportunity to share information and perspectives, as well as to hear from others who have been actively participating in discussions on these topics, and others, of great interest and importance.

Thank you for the opportunity to testify.

Related Materials

- The Ratemaking Process (fact sheet by Synapse Energy): <https://www.synapse-energy.com/sites/default/files/Ratemaking-Fundamentals-FactSheet.pdf>
- Utility Dive, Jan. 2, 2024, "California rooftop solar had a tough year following NEM 3.0. Can the industry bounce back?" <https://www.utilitydive.com/news/california-rooftop-solar-nem-30-outlook/702498/>
- Los Angeles Times, December 28, 2023, "Editorial: Solar installations are plummeting and California regulators are to blame" <https://www.latimes.com/opinion/story/2023-12-28/editorial-solar-installations-are-plummeting-and-california-regulators-are-to-blame>
- Solar Builder Magazine, January 2, 2024, "Grappling with California's Solar Market Crash" <https://solarbuildermag.com/news/the-ride-of-a-lifetime-on-the-solar-coaster/>

TESTIMONY OF
LEODOLOFF R. ASUNCION, JR.
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII

TO THE
HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

January 30, 2024
9:00 a.m.

Chair Lowen, Vice Chair Cochran, and Members of the Committee:

MEASURE: H.B. No. 1687

TITLE: RELATING TO ENERGY RESILIENCY.

DESCRIPTION: Requires retail crediting for energy exports enrolled in grid services programs, whereby energy exported to the electrical grid past a participating customer-generator's point of common coupling from photovoltaic solar systems paired with battery storage as part of a utility-controlled grid service program would be credited at the full retail rate of electricity for the relevant time period.

POSITION:

The Public Utilities Commission ("Commission") offers the following comments for consideration.

COMMENTS:

The Commission appreciates the intent of this measure to encourage customer investments in resiliency through the deployment of distributed energy resources ("DER"), particularly solar plus storage systems. As the regulator of Hawaiian Electric and the Kauai Island Utility Cooperative, the Commission recognizes the important role that distributed energy plays in the reliable delivery of electric service to customers and in the transition to 100% renewable energy.

The Commission agrees with the purpose of this measure to provide fair compensation for distributed energy exports. In a recent Order on Hawaiian Electric's programs, the Commission outlined five objectives guiding distributed energy program design: (1) to encourage DER adoption, (2) to provide fair rates and incentives, (3) to align customer

behavior with grid needs, (4) to provide avenues for low- and moderate-income (“LMI”) customer participation, and (5) to avoid harmful bill impacts on non-participating ratepayers.¹

To determine ‘fair’ incentives, the Commission oversees a collaborative process with the utility, the consumer advocate, and other stakeholders that relies on extensive analysis to determine the value that distributed energy exports provide to the grid. This process has generally determined that the value that distributed energy exports provide to the grid is lower than the retail rate. The Commission has also explored the value of resiliency, capacity, and ancillary services through this process, but it remains challenging to determine a precise quantitative figure for these benefits.

The Commission also notes that the value of distributed energy exports will evolve during the renewable energy transition. For Hawaiian Electric’s programs, the Commission has established an ‘update framework’ that requires regular review of the compensation rate for distributed energy exports and a mechanism to update the program every three years to ensure that the programs are meeting the above goals and to continue to refine compensation for resiliency and other benefits.

Establishing the compensation rate for distributed energy exports through statute may limit the Commission’s ability to investigate the role of distributed energy in the State and design programs to meet the above objectives. Additionally, the Commission emphasizes that it is important to understand the impact of this measure on non-participating ratepayers. Increasing export credits may cause non-participating ratepayers to bear a larger energy burden, which is an important focus for the Commission. The Commission notes that a definition of “full retail rate” would be useful in this measure, as there could be different interpretations of such language.

Thank you for the opportunity to testify on this measure.

¹Decision and Order No. 40418, filed December 4, 2023 in Docket No. 2019-0323 at 56; available at: <https://shareus11.springcm.com/Public/Document/25256/3d1f570f-1393-ee11-b83e-48df377ef808/320f30bb-9e93-ee11-b83e-48df377ef808>.

HB-1687

Submitted on: 1/27/2024 5:01:28 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Christopher Dean	Clean the Pacific, Recycle Hawaii	Support	Remotely Via Zoom

Comments:

HB1687

I fully support HB1687. I have been asking for something like this for decades. When HECO stopped net metering, installation of home and commercial solar installations virtually stopped. Right up until that moment, solar installation was booming. There was so much work installing solar, that contractors from the mainland had to come to Hawaii. If HECO hadn't stopped net metering, I feel certain that Hawaii would already be 100% solar powered, with a booming economy to show for it. It's too bad we lost all those critical years and now the situation is so dire, that it might already be too late. However, we now have the opportunity to enact legislation that would again spur citizens and businesses to purchase rooftop solar. Make no mistake about it, this is our last chance to make meaningful change. Please pass HB1687

HB-1687

Submitted on: 1/28/2024 1:42:56 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
laurel brier	Kauai Climate Action Coalition	Support	Written Testimony Only

Comments:

Rooftop solar has been an important contributor to Kauai Island Utilities Coop reaching almost 80% clean renewable energy. Providing incentives to families to purchase solar forr top systems plus storage systems that sends clean power back to the grid will help move utility companies on all the islands toward clean, less expensive energy and away from destruction GHG emissions.

HB-1687

Submitted on: 1/28/2024 1:43:51 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
robert brower	Surfrider Foundation Kauai chapter	Support	Written Testimony Only

Comments:

strong support



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Executive Officers

Gary Okimoto, Safeway Hawaii, *Chair*
Maile Miyashiro, C&S Wholesale Grocer, *Vice Chair*
Kit Okimoto, Okimoto Corp., *Secretary/Treas.*
Lauren Zirbel, HFIA, *Executive Director*
Paul Kosasa, ABC Stores, *Advisor*
Derek Kurisu, KTA Superstores, *Advisor*
Toby Taniguchi, KTA Superstores, *Advisor*
Joe Carter, Coca-Cola Bottling of Hawaii, *Advisor*
Eddie Asato, Pint Size Hawaii, *Immediate Past Chair*

TO: Committee on Energy and Environmental Protection

FROM: HAWAII FOOD INDUSTRY ASSOCIATION
Lauren Zirbel, Executive Director

DATE: January 30, 2024

TIME: 9am

PLACE: Conference Room 325

RE: HB1687 Relating to Energy Resiliency

Position: Support

The Hawaii Food Industry Association is comprised of two hundred member companies representing retailers, suppliers, producers, manufacturers, and distributors of food and beverage related products in the State of Hawaii.

Dear Chair Lowen, Vice Chair Cochran, and Members of the Committee,

I am writing to express the strong support of the Hawaii Food Industry Association (HFIA) for H.B. No. 1687, a bill relating to energy resiliency in the State of Hawaii. We commend the legislature for recognizing the critical role of distributed energy resources, specifically solar plus storage systems, in ensuring a resilient and reliable power supply for our communities.

The Hawaii Food Industry Association represents a diverse array of businesses within the food industry, ranging from local grocery stores to food distributors. Our members play a crucial role in the distribution of essential goods and services, especially during emergencies and unforeseen events. As demonstrated by the aftermath of the catastrophic Maui wildfires, having a resilient power infrastructure is paramount for ensuring the continuous operation of businesses, supporting emergency response efforts, and safeguarding the well-being of our communities.

We appreciate the emphasis in H.B. No. 1687 on fair compensation for energy exports enrolled in grid services programs, particularly the proposal to credit energy exports from photovoltaic solar systems paired with battery storage at the full retail rate of electricity for the relevant time period. This approach not only encourages the deployment of solar plus storage systems but also recognizes the valuable contribution of these systems to grid stability and resiliency.

Moreover, the establishment of compensation values for resiliency, capacity, and ancillary services aligns with our shared goal of building a robust and sustainable energy infrastructure that can withstand the challenges posed by extreme weather events, such as hurricanes and wildfires.

In conclusion, the Hawaii Food Industry Association supports H.B. No. 1687 and urges the committee to consider its passage. This legislation represents a positive step towards fostering a more resilient and sustainable energy future for Hawaii, benefitting businesses, residents, and the overall well-being of our state.

Thank you for your attention to this matter, and we look forward to the continued collaboration for the betterment of our community.

**Hawaii
Legislative
Council
Members**

Joell Edwards
Wainiha Country
Market
Hanalei

Russell Ruderman
Island Naturals
Hilo/Kona

Dr. Andrew Johnson
Niko Niko Family
Dentistry
Honolulu

Robert H. Pahia
Hawaii Taro Farm
Wailuku

Maile Meyer
Na Mea Hawaii
Honolulu

Tina Wildberger
Kihei Ice
Kihei

L. Malu Shizue Miki
Abundant Life
Natural Foods
Hilo

Kim Coco Iwamoto
Enlightened Energy
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Chamber of
Sustainable
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96823



Rep. Nicole E. Lowen, Chair
Rep. Elle Cochran, Vice Chair
Comm. on Energy & Environmental Protection

Tuesday, January 30, 2024
9:00 am
Conference Room 325 or via Zoom

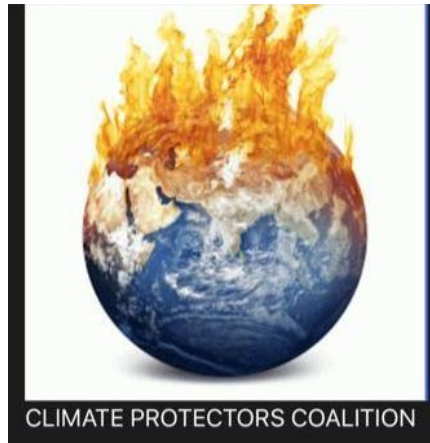
RE: HB1687 RETAIL RATE FOR RENEWABLE ENERGY - SUPPORT

Dear Chair Lowen, Vice Chair Cochran & Committee Members,

The Chamber of Sustainable Commerce represents over 100 small businesses across the State of Hawaii that strive for a triple bottom line: people, planet and prosperity; we know we can strengthen our economy without hurting workers, consumers, communities or the environment. This is why we support HB1687, which would allow customers to be fairly compensated for using their solar and battery systems to support the utility grid.

In doing so, these systems offer a relatively cost-effective option for building resiliency not just for individual families, but the energy grid as a whole.

Rooftop solar has been a driver of Hawaii's clean energy progress over the years. Providing incentives to families to purchase solar plus storage systems helps save the planet from climate-destroying greenhouse gases. This is an important step to help Hawaii meet its climate goals, reduce costs for residents, and help our grid become more resilient.



To: The Honorable Representative Nicole Lowen, Chair, the Honorable Elle Cochran, Vice Chair, and Members of the Committee on Energy and Environmental Protection.

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing **HB1687 RELATING TO ENERGY RESILIENCY**

Hearing: Tuesday January 30, 2024 9:00 a.m.

Aloha Chair Lowen, Vice Chair Cochran, and Energy and Environmental Protection Committee Members:

The mission of the Climate Protectors Hawai'i is to educate and engage the local community in climate change action, to help Hawai'i show the world the way back to a safe and stable climate.

The Climate Protectors Hawai'i SUPPORTS HB1687!

Electricity can become more resilient in Hawai'i if we encourage distributed customer generation through solar photovoltaic with battery storage systems. This bill would encourage such valuable customer generation by crediting their energy exports to the electricity grid at the full retail value in a utility-controlled grid

service program. This incentive would benefit customers and help Hawaii reach its carbon negative target.

Please pass this bill.

Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)



To: The House Committee on Energy and Environmental Protection
From: Sherry Pollack, 350Hawaii.org
Date: Tuesday, January 30, 2024, 9am

In strong support of HB1687

Aloha Chair Lowen, Vice Chair Cochran, and Energy and Environmental Protection Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org is in **strong support of HB1687** that requires full retail rate crediting for energy exports enrolled in grid services programs.

Solar and battery storage systems can play a critical role in providing resilient and affordable power across the entire State if properly funded and supported. HB1678 allows customers to be fairly compensated for using their solar and battery systems to support the utility grid. In doing so, these systems offer a relatively cost-effective option for building resiliency not just for individual families, but the energy grid as a whole.

By providing fair compensation to customers who generate their own electricity from solar power and send the electricity they aren't using back into the grid, it will incentivize more customers to purchase solar systems that go beyond serving their own needs-- to the benefit of all. When customer systems produce more than their own needs and send electricity back to the grid, they lower grid costs for all customers, and by doing so, help build the clean energy grid of the future from the bottom up.

Rooftop solar has been a driver of Hawaii's clean energy progress over the years. Providing incentives to families to purchase solar plus storage systems helps save the planet from climate-destroying greenhouse gases. This is an important step to help Hawaii meet its climate goals, reduce costs for residents, and help our grid become more resilient. We urge you to pass HB1687.

Mahalo for the opportunity to testify in **strong support** of this important legislation.

Sherry Pollack
Co-Founder, 350Hawaii.org

HB-1687

Submitted on: 1/29/2024 7:12:25 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
PAUL OREM	Photonworks Engineering	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market. The current proposal is a non starter for our customers and the industry. There is no reason for anyone to participate in the program as proposed. The current terms offered by the utility will only encourage further grid defection rather than utilizing customer sited assets to help the grid. The only viable option for customers is to use their assets for themselves and further weaken the utility's ability to strengthen the grid. I can't recomend ato any of our customers to participate in the currently proposed tarriffs and a retail credit is the only way to get any meaningful participation by industry. It is crucial for HB1687 to pass and become law otherwise the other programs are dead on arrival.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Paul Orem

CEO Photonworks Engineering LLP

HB-1687

Submitted on: 1/29/2024 7:19:23 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Ryan Hamilton	Inception Financial LLC	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

We are planning to invest over \$100 Million into Hawaii over the next 3 years. This will drive job creation, deliver meaningful State and local tax revenue and foster both economic and social benefits to thousands of local HI residents.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Ryan Hamilton

Managing Partner

Inception Financial LLC

HB-1687

Submitted on: 1/29/2024 7:26:17 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Isidro Villaflor	PV Tech	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Isidro Villaflor

HB-1687

Submitted on: 1/29/2024 7:28:27 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Patrick Sterns	SunPower Corporation	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

On behalf of SunPower Corporation, I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs.

SunPower is a leading clean energy provider delivering solar, storage, and other energy management solutions in North America. We are an American company that has been doing business since 1985 and have been active on the Big Island, Maui, Kuai and O’ahu for the last 15 years. In Hawai’i, our business is focused on selling and installing solar and solar-powered batteries to help our customers save on energy bills, have backup power in case of outages, and more recently, provide Hawai’i utilities’ solar-powered stored energy back to the grid for everyone’s benefit at the times it is needed most. Through our network of dealers – small, independent businesses - we also support the employees of over a dozen local solar companies with competitive wages and good benefits. Just last year, in 2022, SunPower’s dealers in Hawai’i installed 6.8 megawatts (MW) of consumer solar power, enough to power 1,270 homes.

We are dismayed and concerned with the recent decision regarding the new tariff structure for the “Smart DER Export” and “Bring Your Own Device” programs, which threatens to upend years of progress we have collectively made shaping what we thought would be a model distributed generation tariff. The Order includes unfavorable and unworkable provisions, and we sadly think that without the revised edits proposed by the DER parties, will not get any uptake among consumers, who will continue to pursue non-export schemes which will not help the grid in times of need. Specifically, the problems with the tariff include:

- Requirements for controllability that are technically infeasible at this time in the market;
- Sub-retail rates for grid service exports that disincentivize participation in the BYOD program; and
- Low initial compensation rates that are insufficient to motivate the market to participate in the program.

Based on our nearly 40 years of experience in distributed generation markets, we unfortunately foresee that the provisions will cause the market to turn almost exclusively to non-export systems or defect from the grid outright.

Instead of enabling customer-owned solar to strengthen the grid and increase access to solar, the decision would limit customers' choices and forces them to either pay the utility for power or save stored energy for their sole use instead of sharing it with the grid during times of need, increasing costs for everyone. This is a backward step for Hawai'i and will delay progress towards 100% self-supplied clean energy. The decision reverses the success and learnings of the Battery Bonus program, which enrolled more than 45 MW of rooftop solar and battery systems on O'ahu and Maui – these systems were rapidly deployed to help support the grid after important modifications were made to the compensation structure.

This recent order will likely cause immediate and lasting negative market impacts as severe or worse than the negative market impacts eight years ago, when the Commission's closure of the original net-metering program caused more than a 60% contraction in the Hawai'i solar industry and the loss of almost 2,000 jobs. It took several years for the industry to recover those jobs, and the need to deploy clean energy is even greater now.

Distributed solar has already contributed to almost half of HECO's renewable energy portfolio and collectively comprises the largest resource on HECO's grids. All that progress hangs in the balance with this order as written.

Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Patrick Sterns

SunPower



Testimony Before the House Committee on Energy and Environmental Protection

By David Bissell
President and Chief Executive Officer
Kaua'i Island Utility Cooperative
4463 Pahe'e Street, Suite 1, Līhu'e, Hawai'i, 96766-2000

Tuesday, January 30, 2024; 9:00 am
Conference Room #325 & Videoconference

House Bill No. 1687 - RELATING TO ENERGY EFFICIENCY

To the Honorable Nicole Lowen, Chair; Honorable Elle Cochran, Vice Chair; and Members of the Committee:

Kaua'i Island Utility Cooperative (KIUC) is a not-for-profit utility providing electrical service to more than 34,000 commercial and residential members.

KIUC opposes this legislation.

As you may be aware, KIUC leads the state in renewable generation at 60%, and for nearly two years has posted the lowest residential electric rates in Hawai'i. KIUC currently has 124.7 megawatts of solar generating capacity, approximately 30% of which comes from rooftop solar. The number of rooftop solar systems on Kaua'i has risen from 388 in 2010 to roughly 6,000 today. Of that total, 1,800 have batteries. In 2023 KIUC members installed 716 new rooftop solar systems, with 639 members adding a battery storage component to either new or existing systems.

KIUC offers two options for members wishing to install new rooftop systems:

- A "right-sized" system that is based on the member's average monthly energy usage.
- For systems exceeding the "right-sized" criteria, a customer can have a larger system which can export to the grid when KIUC has available load to use the exported energy. These customers are compensated for export with either an energy credit or payment from KIUC as prescribed in the Schedule Q Modified Tariff. KIUC's Schedule Q Tariff is designed to compensate members for their export at a rate equivalent to that paid to KIUC's other non-renewable fueled energy.

The Schedule Q payment rate is known as "avoided cost" and can be significantly higher than the cost of new or existing renewable energy, or what we would consider to be fair market price. To that point, please note costs of various KIUC's solar renewable resources:

- ✓ Schedule Q energy credit payment rate (January 2024): \$0.16698 per kWh
- ✓ AES Lāwa'i solar plus storage: \$0.11 per kWh
- ✓ AES PMRF solar plus storage: \$0.1085 per kWh

It's important to note Schedule Q customers are currently compensated at a rate 50% higher than our two largest utility scale solar plus storage projects (AES Lāwa'i and PMRF), which also deliver important grid benefits that distributed resources cannot offer.

KIUC often reaches 100% renewable during sunny periods, and the oversized systems are subject to curtailment during periods when inadequate system demand disallows the exported energy to be used on the grid. Otherwise, these systems would be exporting energy to the grid, which results in another existing lower-priced renewable energy source being curtailed.

Unfortunately, not all of KIUC's members have the financial means and/or the ability to install rooftop systems. In the interest of fairness to all members, KIUC's Schedule Q Modified Tariff compensates members for the value of the exported energy, while minimizing subsidization.

To underscore this point, if KIUC were to compensate Schedule Q customers at the full retail rate, in January 2024 that rate would be \$0.36 per kWh. This is more than double the current Schedule Q Tariff, and more than triple the PPA price for either of the AES solar plus storage projects. This creates a significant inequity that is especially burdensome on low- and moderate-income members who can't afford to take advantage of Schedule Q.

KIUC does agree that distributed solar and battery systems can be of benefit to customers in the event of power outages or disasters. KIUC notes, under existing tariffs and policies, the combination of battery systems and rooftop solar can allow a customer to offset full retail rates, up to the customers full energy usage. KIUC also recognizes that for certain utility systems lacking adequate available renewable generation sources or reserve generating capacity, distributed systems with batteries can be a valuable grid resource and tariffs should be designed to reflect this value. KIUC has been an industry leader in both utility scale PV and battery storage utilization, which reduces the value of distributed energy to our grid.

In summary, KIUC does not support paying full retail energy rates for distributed solar exported to Kaua'i's grid. Such a rate is inequitable to our member/customers, and is not based on economic justification since the benefits to the grid do not justify the payment amount. KIUC's current tariff provides more than adequate payment and incentive for distributed solar.

In the event this legislation progresses, KIUC would recommend that member owned electric cooperatives be exempted from its provisions. Cooperatives are extremely concerned about equity amongst their customer owners, and developing fair distributed solar rates for any recommended tariff changes is appropriately done within the cooperative structure. As an alternative, KIUC recommends that the Hawai'i Public Utilities Commission be directed to undertake a study on the relative benefits of grid export from distributed solar on an island-by-island basis. Following such a study, an appropriate tariff system can be developed that fairly compensates distributed energy providers, while recognizing each island's different load characteristics and renewable energy resources.

Mahalo for the opportunity to comment.

HB-1687

Submitted on: 1/29/2024 8:18:05 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Jacob Millan	Meyer Burger	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Please ensure the wealthiest with these DERs can participate and help strengthen and reduce the costs of the Hawaiian electrical grid. Without these properly priced "sticks and carrots" to encourage or discourage behavior changes or device participation, the least able to financially afford it will be left holding the bag of an ever expensive grid.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Jake Millan

Business Development - Meyer Burger Americas



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Testimony of the Hawaii Solar Energy Association (HSEA) Regarding HB1687, Relating to Energy Resiliency, Before the House Committee on Energy and Environmental Protection

Tuesday, January 30, 2024

Dear Chair Lowen, Vice Chair Cochran, and committee members,

The Hawaii Solar Energy Association (HSEA) ***strongly supports HB1687***, ensuring fair compensation for customer-sited solar and battery storage systems enrolled in grid service programs. These programs aim to lower electricity costs for all ratepayers, balance the electrical system during grid outages and power shortfalls, and provide resilient and reliable power at times when the grid and ratepayers need that energy the most. We also propose a technical amendment regarding the designated HRS section.

Hawaii is a leader in customer-sited rooftop solar and energy storage. We are in the process of creating a system that utilizes customer investments to share clean and affordable energy with all ratepayers when that energy is needed most. Recent events, like the rolling blackouts on January 8, 2024, demonstrated the effectiveness of rooftop solar and energy storage in mitigating power shortfalls. Up to 19 MW of customer-sited solar and battery storage systems that were enrolled in the Battery Bonus Program kicked in and dispatched their stored energy to help the grid. Moreover, residents and businesses with rooftop solar and energy storage were able to “ride through” the outages, alleviating pressure on grid restoration efforts.

However, the redesign of the successor program to Battery Bonus, effective March 1, 2024, undervalues customer contributions.ⁱ In fact, customer participation in these programs would represent a negative value proposition because solar customers would be selling the energy that they generate and store in their batteries at a lower rate than what it’s worth to use it themselves.ⁱⁱ Instead of creating a program in which solar and battery systems share their energy for the benefit of all ratepayers, customers will be incentivized to build systems to only serve their own needs. This will lead to a fragmented and less reliable grid with continued exposure to high electricity costs.

The HECO Companies acknowledge that they “need this stuff” referring to energy from customer-sited solar and batteries but propose that adjustments can be made later.ⁱⁱⁱ This “after-the-fact fix” will fall short for Hawaii ratepayers because it will put into jeopardy customers’ willingness to participate in helping HECO with the grid.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

In another concerning development, the more than 7,000 customers who installed solar systems after the disruptive closure of the net metering program in 2015, 2016, and 2017 are being compelled to switch to time-of-use rates starting in September 2024, without the option to opt-out.^{iv} This situation creates a counterproductive incentive, forcing customers to export their self-generated energy at lower rates and purchase more expensive electricity during peak and overnight hours. Unless they invest in new batteries or choose to re-enroll in a less-mutually-beneficial non-export program, they will face unfavorable rate increases this year. It's reasonable to assume that these customers did not anticipate being subjected to such discriminatory policy changes years after investing in their solar systems.

Local solar companies are already facing challenges and planning for a significant downturn this year, with potential market impacts similar to the net energy metering program closure in 2015.

We urge the Legislature to establish fair compensation for grid service exports and protect customer choice to lower electric bills. Full retail crediting for grid service exports is crucial for program success, and will provide some protection against the adverse consequences described above.

We also recommend a technical amendment, placing the provision in the Public Utilities Commission section of HRS. See suggested edit in red below:

"~~§196269-~~ Retail crediting for solar and battery storage energy exports. Notwithstanding any law, rule, or ordinance to the contrary, energy exported to the electrical grid past a participating customer-generator's point of common coupling, including metered exports, from photovoltaic solar systems paired with battery storage as part of a utility-controlled grid service program shall be credited at the full retail rate of electricity for the relevant time period. In addition to the retail credit for grid service exports, the commission shall establish compensation values for resiliency, capacity, and ancillary services."

Please advance HB1687. Thank you for the opportunity to provide testimony in strong support.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

Respectfully,

/s/ Rocky Mould

Rocky Mould
Executive Director

About HSEA

Since 1977, HSEA has been advocating for policies that help Hawaii achieve critical climate and resilience goals by enabling residents and businesses to invest in and benefit from the transition to clean energy. These investments provide reliable and affordable power that reduces energy cost burden and contributes to Hawaii's energy security as we decarbonize our economy and electric grid. HSEA members include the majority of locally owned and operated solar and energy storage companies doing business in the state of Hawaii along with leading global cleantech manufacturers and service providers that invest and sell in our market. We employ thousands of residents in diverse green economy jobs that are innovating, designing, and building Hawaii's pathway to a renewable energy future.

Hawaii is a global leader in renewable energy and deployment of distributed rooftop solar and energy storage. Of all the renewable energy added to Hawaii's grid, the great majority comes from customer-sited rooftop solar – 47% in the HECO service areas of Oahu, Maui County, and the Big Island; and 21% on Kauai.^v And Hawaii is the faraway leader in adding batteries to rooftop solar systems at 96% of all installs.^{vi}

ⁱ See *HPVC and HSEA's Motion for Reconsideration, Clarification, and Modification to PUC Order No 40418 in PUC Docket No. 2019-0323* filed on December 14, 2023. (See link here: [DER Parties Motion for Reconsideration to Order No. 40418](#)).

ⁱⁱ See PUC Order No. 40418 in Docket No. 2019-0323 filed on December 4, 2023, at p.29, in which the Commission notes that, "[t]he Companies agree that the highest value for a customer is to self-consume energy from storage and believe that the BYOD Tariff should act as an additional option for customers to lower bills with excess energy and storage that they would not otherwise use."

ⁱⁱⁱ See Civil Beat (<https://www.civilbeat.org/2024/01/will-a-new-order-shut-the-door-on-future-rooftop-solar-across-hawaii/>).

^{iv} See discussion of time-of-use rate requirement for Smart DER customers in *PUC Order No. 40418*, the *DER Parties Motion for Reconsideration to Order No. 40418*; See *HECO's Weekly DER Queue Reports* showing 7,281 CGS customer installations which approximates the number of customers that interconnected in 2015-2017.

^v HECO and KIUC *RPS Reports* in PUC Docket No. 2007-0008.



Hawaii Solar Energy Association
Serving Hawaii Since 1977

^{vi} Barbose, Galen L., Naïm R. Darghouth, Eric O'Shaughnessy, and Sydney Forrester. *Tracking the Sun: Pricing and Design Trends for Distributed Photovoltaic Systems in the United States, 2022 Edition*. (2022).

HB-1687

Submitted on: 1/29/2024 8:30:01 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Casey Lafuente	Alternate Energy Inc.	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,.

Casey Lafuente



**Hawaiian
Electric**

**TESTIMONY BEFORE THE HOUSE COMMITTEE ON
ENERGY & ENVIRONMENTAL PROTECTION**

HB 1687

Relating to Energy Resiliency

Tuesday, January 30, 2024
9:00 am, Agenda Item #7
State Capitol, Conference Room 325

Kaiulani Shinsato
Director, Customer Energy Resources Programs
Hawaiian Electric

Chair Lowen, Vice Chair Cochran, and Members of the Committee,

My name is Kaiulani Shinsato and I am testifying on behalf of Hawaiian Electric **in opposition** to HB 1687, Relating to Energy Resiliency.

This bill would require retail crediting for energy exports enrolled in grid services programs, whereby energy exported to the electrical grid past a participating customer-generator's point of common coupling from photovoltaic solar systems paired with battery storage as part of a utility-controlled grid service program would be credited at the full retail rate of electricity for the relevant time period.

This issue was fully vetted over multiple years and recently decided in the Public Utilities Commission's proceeding on Distributed Energy Resources ("DER"), Docket No. 2019-0323. On December 4, 2023, in an almost 200-page Decision and Order, the Commission denied retail crediting for energy exports enrolled in grid services based on the full record in the proceeding. This bill effectively circumvents years of consideration among multiple stakeholders and thoughtful deliberation by the Public Utilities

Commission in Docket No. 2019-0323. Providing retail crediting also contravenes the Commission's 2015 decision to close the Net Energy Metering ("NEM") program that provides retail crediting for exported generation.

More importantly, providing retail crediting exacerbates concerns about equity and affordability. Retail crediting will significantly increase the cost of Hawaiian Electric's grid services program. These costs are paid for by all customers, including low-to-moderate income customers, and customers on fixed incomes. Hawaiian Electric acknowledges that its grid services programs should provide sufficient incentives for customers to invest in DERs and participate in grid services programs. However, these incentives should not come at a cost that unfairly impacts non-DER customers, including many who are facing financial hardship. As a point of reference, as of December 31, 2023, the estimated lost contribution to fixed costs due to the NEM program was over \$103 million, and this cost recovery is shifted into retail rates paid by all customers. This cost shift is the primary reason why the NEM program was not fair and sustainable, and why subsequent DER programs have evolved away from retail crediting. To reinstitute retail crediting now would rewind all the progress the State has made in making DER programs fair, sustainable, and equitable for all customers. Finally, compensation at retail rates for DERs would create a large disparity between what the Company pays to customers versus Independent Power Producers owning utility-scale resources for the same grid service.

For all of these reasons, Hawaiian Electric opposes HB 1687. Thank you for this opportunity to testify.

HB-1687

Submitted on: 1/29/2024 8:59:50 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Dave Mulinix	Greenpeace Hawaii	Support	Written Testimony Only

Comments:

Aloha Chair, CoChair & Committee,

Greenpeace Hawaii stands in Strong Support of HB1678.

Here are a few reasons why it is important to pass this legislation:

- HB1678 allows customers to be fairly compensated for using their solar and battery systems to support the utility grid. In doing so, these systems offer a relatively cost-effective option for building resiliency not just for individual families, but the energy grid as a whole.

- By providing fair compensation to customers who generate their own electricity from solar power and send the electricity they aren't using back into the grid, it will incentivize more customers to purchase solar systems that go beyond serving their own needs-- to the benefit of all.

- HB1687 would require full retail rate crediting for customers with solar plus storage who send excess energy their panels generate to the local grid. When customer systems produce more than their own needs and send electricity back to the grid, they lower grid costs for all customers , and by doing so, help build the clean energy grid of the future from the bottom up.

- Rooftop solar has been a driver of Hawaii's clean energy progress over the years. Providing incentives to families to purchase solar plus storage systems helps save the planet from climate-destroying greenhouse gases. This is an important step to help Hawaii meet its climate goals, reduce costs for residents, and help our grid become more resilient.

Please pass HB1678.

Mahalo,

Dave Mulinix, CoFounder, Greenpeace Hawaii

HB-1687

Submitted on: 1/29/2024 9:42:27 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Paul Kuromoto	Solar Help Hawaii	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

The solar market is already affected by higher interest rates making it more difficult to finance residential solar projects.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

HB-1687

Submitted on: 1/29/2024 10:02:16 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Miles	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Mahalo for your time

Sincerely,

Miles Yoshimoto

Project Developer

Alternate Energy Inc.

96-1276 Waihona Street Unit 114, Pearl City HI 96782

HB-1687

Submitted on: 1/29/2024 10:29:47 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Alan Lennard	GREEN POWER PROJECTS	Support	Written Testimony Only

Comments:

Alan Lennard

Green Power Projects LLC

P.O. Box 818, Haleiwa, HI 96712

1/29/24

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs.

Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services.

If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access

to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Alan Lennard

Green Power Projects LLC



Sunnova Energy Corporation
20 Greenway Plaza, Suite 540
Houston, TX 77046
sunnova.com

January 29, 2024

Re: Strong support for HB 1687, Retail Crediting for Grid Service Program Exports

Dear Chair Lowen, Vice Chair Cochran and committee members,

Sunnova Energy International, Inc. is a national provider of solar energy as a service. Founded in 2012, Sunnova services more than 380,000 customers across 40 States and U.S. territories including Hawaii. We strongly support HB 1687 which requires fair retail crediting for customer participation in grid service program exports.

The recent vote at the Public Utilities Commission (PUC) will drive customers away from enrolling in important clean energy programs which have historically helped keep the lights on when Oahu's coal plant shut down. HB 1687 is urgently needed to correct this error at the PUC. HB 1687 addresses a fundamental issue: fair compensation for customers who generate local, sustainable electricity and send it back to the grid when electricity is at peak demand. Absent appropriate legislation to pay residents a fair participation rate, residents will not be incentivized to invest in solar and storage. Getting these program details right is important to make the grid cleaner and also to leverage existing customer infrastructure that benefits *everyone*.

Since the 2022 shutdown of Oahu's coal plant, it is critically important to appropriately incentivize customers to add storage to their rooftop solar systems and to send clean electricity to the grid when the island needs power. The previous "Battery Bonus" program was successful in lowering Oahu's grid demand daily by 15 to 17 megawatts during the evening hours, due in part to the fair program compensation levels. The PUC erred in not making the Battery Bonus program permanent and instead, stripping away reasonable rewards for customers who help the grid at large.

HB 1687 is imperative to keep the lights on and help Hawaii meet its goals of clean electricity by 2045. Many of the coal plant replacement projects remain stalled, which makes the viability of these programs even more urgent. Oahu clearly needs more clean capacity. Solar/storage customers play a vital role in Hawaii's efforts to decarbonize. When customers sign up to help the grid with a privately-owned solar and battery, we must support their investment and their role in combatting climate change.

Thank you for your leadership in compensating responsible customers at the retail rate when they participate in these decarbonization programs. We look forward to continuing to work with you to advance Hawaii's role as a leader in clean energy.

Respectfully,

A handwritten signature in black ink, appearing to read "Meghan Nutting". The signature is fluid and cursive, with the first name "Meghan" written in a larger, more prominent script than the last name "Nutting".

Meghan Nutting, EVP of Government and Regulatory Affairs
Sunnova Energy International

HB-1687

Submitted on: 1/29/2024 1:31:09 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Scott Saville	LegaSea Energy	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I STRONGLY SUPPORT HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Mahalo,

Scott

HB-1687

Submitted on: 1/29/2024 2:19:56 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Neal Martin	Elcco Electric	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. If the credit for grid service is below retail rate, then it is extremely challenging if not impossible to obtain customer participation. This will cause customers to focus on self consumption options which essentially effects rate payers, but primarily low to moderate income rate payers the most. The HB1687 bill is very important to move our transition away from fossil fuels, and keep the pace with energy technologies for a cleaner and brighter future.

Mahalo for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Neal Martin

Solar Project Developer

Elcco Inc.

SUNRUN

LATE *Testimony submitted late may not be considered by the Committee for decision making purposes.

Before the EEP Committee
January 29, 2024

IN SUPPORT of HB1687 – Relating to Energy Resiliency

Dear Chair Lowen, Vice Chair Cochran, and distinguished Members of the Committee on Energy and Environmental Protection,

Sunrun is the nation's leading home solar, battery storage and energy services company, and has a long and proud history in Hawai'i with office and warehouse locations on O'ahu, Maui, and Hawai'i Island. We employ more than 350 professionals across the islands, including sales/marketers, customer experience professionals, and installation team members including electrical inspectors, technicians, forepersons and warehouse personnel.

Sunrun strongly supports HB1687, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Distributed solar and battery systems have already demonstrated their ability to support grid resiliency. The island of O'ahu experienced rolling blackouts¹ on January 8, 2024 when two Hawaiian Electric generating units at Waiiau Power Plant went offline, but up to 19 MW of energized, operational Battery Bonus systems were able to support grid resiliency and supply power to the grid in this emergency situation. With the appropriate retail crediting structure, this powerful fleet of distributed solar and storage will continue to grow and support overall grid functionality and resiliency. Without proper crediting, however, customers will be driven to self-consumption.

Sunrun strongly supports HB1687 and respectfully urges the committee to advance this measure to ensure our more affordable and resilient energy transition for all ratepayers. Mahalo for the opportunity to provide testimony on this critical legislation. As a national solar, storage and energy services company, Sunrun has a broad view of states' clean energy policies and stands ready to assist Hawai'i with its policy goals.

Sincerely,



Steven Rymsha
Director Grid Solutions, Public Policy
steven.rymsha@sunrun.com
808-220-7377

¹ <https://www.hawaiianelectric.com/update-rolling-oahu-outages-initiated-customers-asked-to-reduce-use-of-electricity>

HB-1687

Submitted on: 1/29/2024 3:51:40 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
James Rudolph	Independent Energy	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write you in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market. A fair retail rate helps everyone out here, especially those who need it most.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

James B. Rudolph

COO Independent Energy

HB-1687

Submitted on: 1/29/2024 5:33:53 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Nathaniel Kinney	Hawaii Regional Council of Carpenters	Support	In Person

Comments:

We write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage; and cause a significant downturn in the solar market.

HB-1687

Submitted on: 1/29/2024 7:23:04 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Michael Billet	Sunspear Energy, LLC	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Michael J Billet

Director, Commercial Business Development

Sunspear Energy

808.927.8848

mike@sunspearenergy.com



January 30, 2024

Representative Nicole Lowen
House Committee on Energy and Environmental Protection

RE: HB1687 – RELATING TO ENERGY RESILIENCY
Hearing: Tuesday, January 30, 2024, 9:00 a.m.
Position: **IN STRONG SUPPORT**

Chair Lowen, Vice-Chair Cochran, and members of the committee:

My name is Will Giese. I am the Senior Director of Government Affairs for The Solaray Corporation. Solaray was founded in 1975 and does business in Hawai'i as Inter-Island Solar Supply. Solaray also wholly owns Pacific Panel Cleaners ("PPC"), Generator & Power Systems ("GPS"), both Hawai'i Corporations, SunEarth, Inc., a California Corporation, and Alternate Energy Technologies (AET), a Florida Corporation. SunEarth & AET are domestic manufacturing companies producing American made clean energy products, much of which is installed and operated throughout Hawaii for over 40 years. GPS is the Generac Industrial generator distributor for Hawai'i. Solaray Corp., and its wholly owned subsidiaries, are proudly 100% employee owned.

I am testifying **IN STRONG SUPPORT of HB1687**, relating to Energy Resiliency.

This bill requires retail crediting for energy exports enrolled in grid services programs, whereby energy exported to the electrical grid past a participating customer-generator's point of common coupling from photovoltaic solar systems paired with battery storage as part of a utility-controlled grid service program would be credited at the full retail rate of electricity for the relevant time period.

COMMENTS

For over a decade the solar industry, the public utilities commissioners and staff, state agencies, and the utility have been working to develop a rooftop solar program that leverages the state's considerable rooftop solar resources in a way that effectively and efficiently benefits all grid users, whether they be rooftop solar adopters or not. This programmatic development culminated in the December 4, 2023 DER Phase 3 Decision and Order, which creates a scenario in which the most logical, economical choice for a customer choosing to go solar is one in which there is no incentive for a rooftop solar adopter to export their self-generated energy on to the grid as doing so would represent a financial loss to the consumer. This harms all grid

participants and robs electric consumers of the ability to save energy and build resilience and risks the livelihood of thousands of local solar jobs throughout the state.

This bill would give rooftop solar consumers that produce energy at the point in which it is most needed a proper price signal, incentivizing them to export that energy on to the grid instead of self-consuming. This in turn lowers the burden of the utility to produce energy at peak, from fossil fuels when it is most expensive, thus lowering the cost of the utility to serve all consumers. It also increases the resilience of the electric system by shifting some of the electric production burden on to distributed rooftop solar systems rather than centralized generators, many of which are located in flood prone areas and rely on fossil fuels.

Rooftop solar systems are an integral part of Hawaii’s clean energy ecosystem. To date the state has invested *over \$4.5 billion* and installed almost *2,000,000 kilowatts* of solar.¹ This industry directly employs almost 3,000 workers and thousands more in support roles, hosts over 120 local businesses, and has successfully installed over 100,000 systems around the state. They provide power not only to the homes and buildings they are installed *on*, but the communities they are installed *in*. They create and sustain a thriving and vibrant clean energy community and make up more than half of all of Hawaii’s renewable energy generation.

The effects of this decision on Hawaii’s rooftop solar and clean energy economy will be immediate and devastating, absent meaningful policies such as those in HB1687. Systems installed under this new program will be smaller in both size and total number. Companies that employ workers in good-paying jobs are already being forced to make hard decisions about what their workforce will look like in 2024 and beyond. Manufacturers of clean energy goods are cutting product forecasts, and companies built around supporting the rooftop solar industry are predicting a market downturn. As a result, the state will see less tax revenue, less employment, and less economic growth.

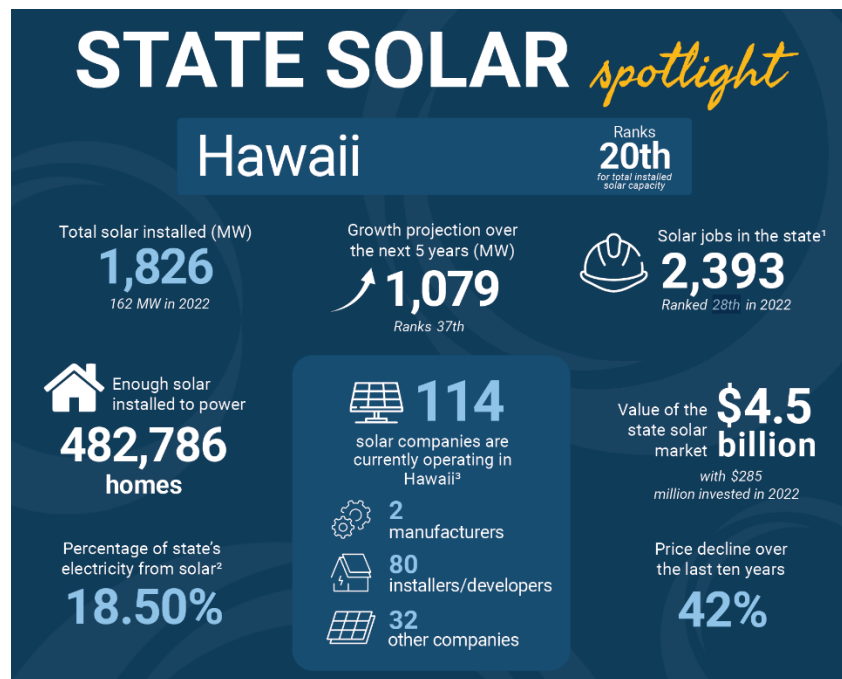


Figure 1: Image Courtesy of Solar Energy Industries Association

¹ See <https://www.seia.org/state-solar-policy/hawaii-solar>

The legislature and this committee have an opportunity to protect the local solar industry by passing crucial legislation like HB1687.

As a local, employee-owned solar business owned and operated in Hawaii for over 40 years, we again express our **STRONG SUPPORT for HB1687** and urge the committee to pass this important measure.

Thank you for your time and consideration,

Will Giese
Senior Director, Government Affairs
The Solaray Corporation

HB-1687

Submitted on: 1/27/2024 12:06:38 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
ANDREW ISODA	Individual	Support	Written Testimony Only

Comments:

- HB1678 allows customers to be fairly compensated for using their solar and battery systems to support the utility grid. In doing so, these systems offer a relatively cost-effective option for building resiliency not just for individual families, but the energy grid as a whole.

- By providing fair compensation to customers who generate their own electricity from solar power and send the electricity they aren't using back into the grid, it will incentivize more customers to purchase solar systems that go beyond serving their own needs-- to the benefit of all.

- HB1687 would require full retail rate crediting for customers with solar plus storage who send excess energy their panels generate to the local grid. When customer systems produce more than their own needs and send electricity back to the grid, they lower grid costs for all customers , and by doing so, help build the clean energy grid of the future from the bottom up.

- Rooftop solar has been a driver of Hawaii's clean energy progress over the years. Providing incentives to families to purchase solar plus storage systems helps save the planet from climate-destroying greenhouse gases. This is an important step to help Hawaii meet its climate goals, reduce costs for residents, and help our grid become more resilient.

HB-1687

Submitted on: 1/27/2024 4:54:10 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Judith A Mick	Individual	Support	Written Testimony Only

Comments:

Strongly support this bill

HB-1687

Submitted on: 1/27/2024 6:19:21 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
L. Osterer	Individual	Support	Written Testimony Only

Comments:

I strongly support this bill, which justly rewards those who are conserving energy and resupplying power from individual rooftop solar. They have been unfairly compensated in the past with less than the equivalent value of kwh provided to the grid. It's time to correct that and encourage more conservation with fair values. We continue to have power outages, especially with equipment failures and upgrades. Rooftop solar provides incentives to families to install solar dstorage systems that help stabalize the grid. This is an important step to help Hawaii meet its climate goals, reduce costs for residents, and help our grid become more resilient. And, it is much more efficient than the cost of developing new hydro-power. It's a "no-brainer."

Thank you for your consideration,

L. Osterer, long-term resident and registered voter

HB-1687

Submitted on: 1/28/2024 8:18:34 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Ben Robinson	Individual	Support	Written Testimony Only

Comments:

I support this initiative.

HB-1687

Submitted on: 1/28/2024 9:03:57 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Maki Morinoue	Individual	Support	Written Testimony Only

Comments:

Aloha,

I strongly support HB1678, which allows customers to be compensated fairly for using their solar and battery systems to support the utility grid. In doing so, these systems offer a relatively cost-effective option for building resiliency for individual families and the energy grid as a whole.

We should create a society where we recognize and encourage this future forward thinking towards climate resilience.

There are well-articulated testifiers on the reasons why we should support it, so I will support this bill!

Mahalo
Maki Morinoue
Hōlualoa
96725

HB-1687

Submitted on: 1/28/2024 11:34:15 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Melissa Barker	Individual	Support	Written Testimony Only

Comments:

Honorable Members,

I respectfully ask that you support HB1687 which requires retail rate for the electricity participating customers add to the grid. HB1687 allows customers to be fairly compensated for using their solar and battery systems to support the utility grid. In doing so, these systems offer a relatively cost-effective option for building resiliency not just for individual families, but the energy grid as a whole.

Thank you for your attention and consideration.

Melissa Barker

Kapaa, HI

HB-1687

Submitted on: 1/28/2024 12:35:03 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Audrey Enseki-Tom	Individual	Support	Written Testimony Only

Comments:

I strongly support HB1687.

HB-1687

Submitted on: 1/28/2024 12:41:59 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Georgia L Hoopes	Individual	Support	Written Testimony Only

Comments:

Strong Support

This bill allows customers to be fairly compensated for using their solar and battery systems to support the utility grid.

HB-1687

Submitted on: 1/28/2024 2:28:21 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
David Ball	Individual	Support	Written Testimony Only

Comments:

Residents who make green choices for our energy needs should be fairly compensated for their decisions. This is an essential piece of legislation to get Hawaii to a sustainable future.

David Ball

Waiialae-Kahala

HB-1687

Submitted on: 1/28/2024 2:46:51 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
John NAYLOR	Individual	Support	Written Testimony Only

Comments:

Aloha,

I would love to be able to afford solar on my older home w/ and orginal electrical system which would need to be replaced. We must encourage everyone to make the transition even retired folks like myself.

JN Makawao

HB-1687

Submitted on: 1/28/2024 4:10:12 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Carol Hemington	Individual	Support	Written Testimony Only

Comments:

By providing fair compensation to customers who generate their own electricity from solar power and send the electricity they aren't using back into the grid, HB 1687 would incentivize more customers to purchase solar systems that go beyond serving their own needs, to the benefit of all. Rooftop solar has been a driver of Hawaii's clean energy progress over the years. Providing incentives to families to purchase solar plus storage systems helps save the planet from climate-destroying greenhouse gases. This is an important step to help Hawaii meet its climate goals, reduce costs for residents, and help our grid become more resilient.

HB-1687

Submitted on: 1/28/2024 6:14:18 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Roy Skaggs	Individual	Support	Written Testimony Only

Comments:

Aloha, Chair Lowen, Vice Chair Cochran, and committee members,

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive and will discourage customer participation. If not adopted, this will ultimately result in a less dependable, less resilient, and a more costly electrical grid.

Thank you for scheduling this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Mahalo!

Roy Skaggs

HB-1687

Submitted on: 1/28/2024 9:41:11 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Cory Harden	Individual	Support	Written Testimony Only

Comments:

Aloha legislators,

Please support this measure to have customers to be fairly compensated for using their solar and battery systems to support the utility grid. Compensation will help families on tight budgets. It will also encourage more use of solar, increasing resiliency and helping Hawai'i meet its climate goals. These multiple, dispersed power sources will be far less vulnerable to disaster than single, centralized sources.

mahalo,

Cory Harden

HB-1687

Submitted on: 1/28/2024 10:10:05 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Ronald "Ron" Reilly	Individual	Support	Written Testimony Only

Comments:

Dear Chair Nicole E. Lowen, and Members of the Committee On Energy & Environmental Protection,

Thank you for hearing HB1687 Relating To Energy Resiliency. Many thanks also to the introducers of this measure which requires retail crediting for energy exports enrolled in grid services programs, whereby energy exported to the electrical grid past a participating customer-generator's point of common coupling from photovoltaic solar systems paired with battery storage as part of a utility-controlled grid service program would be credited at the full retail rate of electricity for the relevant time period.

I believe a key to incentivizing more homeowners to install roof-top solar with battery storage is to credit the homeowner with “the full retail rate for electricity” generated.

This measure will also work to stabilize the solar installation industry which sadly has been subject to “solar-coaster” swings in PUC approved crediting for distributed energy sources.

I respectfully urge your support of this measure.

Sincerely, Ron Reilly
Volcano Village, Hawaii

HB-1687

Submitted on: 1/29/2024 7:08:07 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Terri Rhody	Individual	Support	Written Testimony Only

Comments:

I support this bill

HB-1687

Submitted on: 1/29/2024 7:28:23 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Virginia Tincher	Individual	Support	Written Testimony Only

Comments:

Mahalo for this opportunity to testify

- HB1678 allows customers to be fairly compensated for using their solar and battery systems to support the utility grid. In doing so, these systems offer a relatively cost-effective option for building resiliency not just for individual families, but the energy grid as a whole.

- By providing fair compensation to customers who generate their own electricity from solar power and send the electricity they aren't using back into the grid, it will incentivize more customers to purchase solar systems that go beyond serving their own needs-- to the benefit of all.

- HB1687 would require full retail rate crediting for customers with solar plus storage who send excess energy their panels generate to the local grid. When customer systems produce more than their own needs and send electricity back to the grid, they lower grid costs for all customers, and by doing so, help build the clean energy grid of the future from the bottom up.

- Rooftop solar has been a driver of Hawaii's clean energy progress over the years. Providing incentives to families to purchase solar plus storage systems helps save the planet from climate-destroying greenhouse gases. This is an important step to help Hawaii meet its climate goals, reduce costs for residents, and help our grid become more resilient.

Virginia

HB-1687

Submitted on: 1/29/2024 7:40:50 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Justin Furuta	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Justin Furuta

HB-1687

Submitted on: 1/29/2024 7:49:59 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Greg Tjapkes	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs.

I have worked in the solar industry in Hawaii since 2012, and have seen the impacts of various grid tariffs on supply/demand, and adoption of solar technology by the residents of Hawaii. Without retail credits, demand and adoption slows, and Hawaii will never meet it's clean energy objectives.

Thank you for hearing this important bill. Please pass HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Greg Tjapkes

Kailua

HB-1687

Submitted on: 1/29/2024 8:06:33 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
wei lun lian	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Wei Lun Lian

HB-1687

Submitted on: 1/29/2024 8:08:26 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Alexis	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Alexis Lam Ho

HB-1687

Submitted on: 1/29/2024 8:18:29 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Jeff Lum	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Aloha, Jeff Lum

856 Nana Honua St.

Honolulu, HI 96825

HB-1687

Submitted on: 1/29/2024 8:25:39 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Ashley Fletter	Individual	Support	Written Testimony Only

Comments:

This legislation is necessary to establish a viable grid services tariff and incentives that encourage customer participation and assist the solar industry in continuing to provide power to HECO.

HB-1687

Submitted on: 1/29/2024 8:27:45 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Mary True	Individual	Support	Written Testimony Only

Comments:

Aloha, HB1678 allows customers to be fairly compensated for using their solar and battery systems to support the utility grid. In doing so, these systems offer a relatively cost-effective option for building resiliency not just for individual families, but the energy grid as a whole.

By providing fair compensation to customers who generate their own electricity from solar power and send the electricity they aren't using back into the grid, it will incentivize more customers to purchase solar systems that go beyond serving their own needs-- to the benefit of all.

HB1687 would require full retail rate crediting for customers with solar plus storage who send excess energy their panels generate to the local grid. When customer systems produce more than their own needs and send electricity back to the grid, they lower grid costs for all customers , and by doing so, help build the clean energy grid of the future from the bottom up.

Rooftop solar has been a driver of Hawaii's clean energy progress over the years. Providing incentives to families to purchase solar plus storage systems helps save the planet from climate-destroying greenhouse gases. This is an important step to help Hawaii meet its climate goals, reduce costs for residents, and help our grid become more resilient.

Mahalo for your time and attention, Mary True, Pepekeo, 96783

HB-1687

Submitted on: 1/29/2024 9:01:39 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Radford Nakamura	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,
Radford Nakamura

HB-1687

Submitted on: 1/29/2024 9:07:48 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Kathryn Troyan	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members,

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,
Kathryn Troyan
Makiki Resident

HB-1687

Submitted on: 1/29/2024 9:07:53 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
David Thompson	Individual	Support	Written Testimony Only

Comments:

Please pass this bill. We desperately need this bill to pass. The Solar Industry will not be able to survive without this bill.

HB-1687

Submitted on: 1/29/2024 9:44:32 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Ronald Hooson	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687 to help prevent another Lahaina disaster. Roof Top PV and Wind Inverters IMMEDIATELY shut off electrical power flow at the first instant a voltage anomaly occurs such as what happened when wind driven utility line began to arc on Maui. PV, Wind and Battery power transported over utility power lines would NOT HAVE STARTED A FIRE.

Because of economically driven early adoption momentum, Alternative energy has become cheaper than 100 year ago, then state of the art, oil and coal generation.

Hawaii, more than anywhere on Earth NEEDS to transition to SAFER power which keeps our Local, hard earned dollars, On Island rather than going off island to oil producers.

The economic engine driving our transition to Clearer, SAFER dependable alternative energy is 1 to 1 energy cost offset for our Ohana. Without Local Ohana, economically driven support, our transition to SAFER, Cleaner, Cheaper alternative energy. Hawaii will become another Queen Lili uokalani. Beloved, good for our Ohana, but out of safety and power.

Mahalo

Ron Hooson

HB-1687

Submitted on: 1/29/2024 10:29:53 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Jay Zarghami	Individual	Support	Written Testimony Only

Comments:

To all committee members:

Given the state's "100% Renewables by 2045" mandate, having lived most of my life in Hawaii nei and working as an engineer (sometimes in close coordination with HECO & the PUC in developing technical guidelines and demonstrating effective pilot programs), building solar farms and designing advanced controls technology for interconnected residential battery systems which support this mandated pursuit, I can only comment on what makes logical sense regarding this bill and its effect on ensuring that Hawaii is able to sustainably meet its clean energy goals.

Grid resilience, sustainable growth of interconnected renewable energy, and a diversified portfolio of assets accessible by the grid operator (including deployable edge of grid DERs, i.e. smart home batteries) are an absolutely crucial element for reaching this goal. Equitable compensation for customer-owned resources during times of critical grid need is an absolute requirement for growth and sustainability. Without the retail rate crediting for energy exports from ratepayer smart DERs, and the subsequent disincentive for enrollment, the grid operator will lose access a growing critical resource shown to be effective in the preceding HECO program (Battery Bonus) and in multiple nationwide studies in this field.

Clearly, I write in strong support of HB1687, relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs.

Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, and will put the grid operator at a technical disadvantage. If HB1687 is not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Jay N. Zarghami

HB-1687

Submitted on: 1/29/2024 10:39:34 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Nanea Lo	Individual	Support	Written Testimony Only

Comments:

Hello,

My name is Nanea Lo. I'm born and raised in the Hawaiian Kingdom. I live in Mō'ili'ili. I'm writing in STRONG SUPPORT of HB1687.

- HB1678 allows customers to be fairly compensated for using their solar and battery systems to support the utility grid. In doing so, these systems offer a relatively cost-effective option for building resiliency not just for individual families, but the energy grid as a whole.

- By providing fair compensation to customers who generate their own electricity from solar power and send the electricity they aren't using back into the grid, it will incentivize more customers to purchase solar systems that go beyond serving their own needs-- to the benefit of all.

- HB1687 would require full retail rate crediting for customers with solar plus storage who send excess energy their panels generate to the local grid. When customer systems produce more than their own needs and send electricity back to the grid, they lower grid costs for all customers, and by doing so, help build the clean energy grid of the future from the bottom up.

- Rooftop solar has been a driver of Hawaii's clean energy progress over the years. Providing incentives to families to purchase solar plus storage systems helps save the planet from climate-destroying greenhouse gases. This is an important step to help Hawaii meet its climate goals, reduce costs for residents, and help our grid become more resilient.

me ke aloha 'āina,

Nanea Lo

HB-1687

Submitted on: 1/29/2024 11:52:12 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Faith Texeira	Individual	Support	Written Testimony Only

Comments:

I am in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Mahalo

HB-1687

Submitted on: 1/29/2024 12:34:43 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Zoe Malia Ozoa Loos	Individual	Support	Written Testimony Only

Comments:

Hi! I know y'all don't really read these, and I totally get it. Y'all have lots of important things to do and not a lot of time. I could list all the reasons this bill should be supported, but come on, y'all, the planet is dying, and if the planet goes, we go. There's no arguing around that.

This bill requires full retail rate crediting for the electricity participating customers add to the grid. That's great! Anything to help our community make the switch to renewable energy is good. And they get paid for that? Even better. Adequate compensation and incentive to make a switch to a renewable source of energy that this sunny state has? Fantastic!

Thanks for your time! Let's keep protecting the planet for seven generations to come.

HB-1687

Submitted on: 1/29/2024 12:55:25 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Burk Gingerich	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Burk Gingerich

HB-1687

Submitted on: 1/29/2024 5:19:34 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Brad Albert	Individual	Support	Written Testimony Only

Comments:

I strongly support this measure to mandate retail crediting for energy exports when customers supply energy to support the grid in the GSPA programs or other VPP programs such as Battery Bonus or Bring Your Own Device (BYOD). Last week, I presented at the first-ever RE+ Hawaii Conference on Virtual Power Plants (VPP). For the last year, I have been working for the US Dept of Energy, where I helped draft the US Dept of Energy's Virtual Power Plant Commercial Liftoff Report. The report concluded that VPPs need to be adopted to meet the needs and goals of the United States. It went on to emphasize that VPPs are affordable, Lower carbon emissions, and readily available resources.

Hawaii was a State leading VPP adoption until recently when it chose to credit customers below retail when they provided these valuable services to the grid. We know from experience in the Battery Bonus program that customers won't enroll unless credited at retail rates. Why is this? It's not a complex energy policy. It is simply that if they don't get retail credit, they are effectively compelled to sell low and buy high, creating an obvious disincentive.

The state needs to mandate this policy so that VPPs can flourish and provide valuable and needed energy to the grid.

Please Vote yes on 1687!

Bradley Albert

HB-1687

Submitted on: 1/29/2024 5:23:32 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Kohl Christensen	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Kohl Christensen

LEGASEA ENERGY FOUNDATION

HB-1687

Submitted on: 1/29/2024 5:38:10 PM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Casey Goepel	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I write in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs. Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

CASEY GOEPEL

HB-1687

Submitted on: 1/30/2024 1:50:34 AM

Testimony for EEP on 1/30/2024 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Lori Ann Saunders	Individual	Support	Written Testimony Only

Comments:

Dear Chair Lowen, Vice Chair Cochran, and committee members:

I am in strong support of HB1687, Relating to Energy Resiliency, which requires retail crediting for energy exports within utility-managed grid service programs.

Failing to credit grid service energy exports at the retail rate creates a disincentive that will discourage customer participation in these vital programs, robbing both the grid and ratepayers of these invaluable new grid services. If not adopted, this will ultimately result in a less dependable, less resilient, and more costly electrical grid; decrease access to the benefits of solar and energy storage, and cause a significant downturn in the solar market.

Thank you for hearing this critically important bill. Please advance HB1687 to ensure our more affordable and resilient energy transition for all ratepayers.

Mahalo, Lori Ann Saunders