

# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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Testimony of MARK B. GLICK, Chief Energy Officer



## before the SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

Thursday, February 1, 2024 1:00 PM State Capitol, Conference Room 229 and Videoconference

Providing Comments on **SB 2986** 

### RELATING TO ENERGY RESILIENCY.

Chair DeCoite, Vice Chair Wakai, and members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on SB 2986 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.

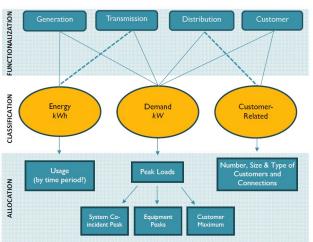
This bill – and the discussions, creative solutions, and hopefully greater understanding – may enable a public conversation about Hawaii's energy potential, capacity, needs, and options that will be enlightening and productive.

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. 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.

As the use of lower-cost renewables<sup>3</sup> 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.<sup>4</sup> 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

<sup>&</sup>lt;sup>1</sup> Hawaii State Energy Office. *Annual Report, Fiscal Year 2023*. <a href="https://energy.hawaii.gov/wp-content/uploads/2024/01/HSEO">https://energy.hawaii.gov/wp-content/uploads/2024/01/HSEO</a> 2023 Annual Report.pdf#page=16

<sup>&</sup>lt;sup>2</sup> Ibid, page 18.

<sup>&</sup>lt;sup>3</sup> Ibid, page 16.

<sup>&</sup>lt;sup>4</sup> The Ratemaking Process (fact sheet by Synapse Energy): <a href="https://www.synapse-energy.com/sites/default/files/Ratemaking-Fundamentals-FactSheet.pdf">https://www.synapse-energy.com/sites/default/files/Ratemaking-Fundamentals-FactSheet.pdf</a>

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 \$0.08 per kilowatt-hour (kWh) to \$0.25 per kWh. The utility's "avoided costs" (essentially, fuel) averaged \$0.22 on-peak and \$0.24 off-peak over the year.<sup>5</sup>

Facility Name	Capacity	Facility Type	Average FY23	Time of	Energy	End Date / Term
	(MW)		(\$ per kWh) <sup>1</sup>	Production	Source	
Waiawa Solar <sup>5</sup>	36 MW	Renewable	\$0.08	Any	Solar	1/31/2043
		Dispatchable				
DER - CGS, CGS	As Available	As Available	\$ 0.10 - \$	Any	Solar	Day to day
Plus, Smart Export			0.15			
Lanikuhana Solar	14.7	As Available	\$0.13	Any	Solar	9/19/2041
Na Pua Makani	24	As Available	\$0.14	Any	Wind	12/11/2040
Feed-in Tariff	Varies	As Available	\$0.23	Any	Solar	20 years
Kahuku Wind Power	30	As Available	\$0.22	Any	Wind	3/22/2031
Kapolei	1	As Available	\$0.24	Any	Solar	12/30/2031
Sustainable Energy Park						
H-POWER	68.5	Firm	\$0.20	On Peak <sup>2</sup>	Waste	4/2/2033
			\$0.15	Off Peak <sup>2</sup>		
Kalaeloa Partners <sup>4</sup>	208	Firm	\$0.23	Any	Fossil	12/31/2032
H-POWER	68.5	Firm	\$0.20	On Peak <sup>2</sup>	Waste	4/2/2033
			\$0.15	Off Peak <sup>2</sup>	1	
Kalaeloa Partners <sup>4</sup>	208	Firm	\$0.23	Any	Fossil	12/31/2032

<sup>&</sup>lt;sup>5</sup> 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]

DER - Smart DER (new, 3/1/24)	As Available	As Available	\$ 0.14 - \$ 0.33	Any	Solar	Day to day
Avoided Energy Cost Rate		\$0.22	On Peak <sup>2</sup>	Fossil	None	
(primarily low sulfur fuel oil and diesel fuel)		\$0.24	Off Peak <sup>2</sup>			

<sup>&</sup>lt;sup>1</sup> Based on 12-month averages of actual energy costs unless otherwise noted; does not include capacity payments (if applicable).

The prices shown on the previous page shows the range of costs by which Hawaiian Electric purchases and generates electricity, which directly affect the prices paid by customers on Oʻahu for electricity. This range of options include utility scale wind and solar, solar at the feed-in-tariff rate, and distributed energy resources (DER). While this measure deals primarily with grid services from excess DER to support grid stability, the appropriate tariff for grid services would be informed by a comparison of all potential inputs for such services, with the full retail price of the original Net Metering Program at the upper end of the scale. The appropriate balance will ensure fairness for all customers, and should not be arbitrarily chosen.

O'ahu's residential retail electricity rates have several components,<sup>6</sup> as shown below for O'ahu residential service, effective January, 2024.

### SCHEDULE 'R' – RESIDENTIAL

EFFECTIVE RATES<sup>1</sup>

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 \$ 0.392				
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			

<sup>&</sup>lt;sup>6</sup> 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

<sup>&</sup>lt;sup>2</sup> "On peak" is from 7 AM to 9 PM. "Off peak" is from 9 PM to 7 AM.

<sup>&</sup>lt;sup>3</sup> Average Energy Price does not include reactive adjustment.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> Energy Price is based on annual Net Energy Potential

Green Infrastructure Fee.	, per customer, per month - Add to all bills
Oloon minachactare i co,	, por eactorner, per morter i real to an onio

\$ 1.47

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.

SB 2986 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, SB 2986 goes on to propose that in addition to the 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): <a href="https://www.synapse-energy.com/sites/default/files/Ratemaking-Fundamentals-FactSheet.pdf">https://www.synapse-energy.com/sites/default/files/Ratemaking-Fundamentals-FactSheet.pdf</a>
- 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"

   <a href="https://www.latimes.com/opinion/story/2023-12-28/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</a>
- Solar Builder Magazine, January 2, 2024, "Grappling with California's Solar Market Crash" <a href="https://solarbuildermag.com/news/the-ride-of-a-lifetime-on-the-solar-coaster/">https://solarbuildermag.com/news/the-ride-of-a-lifetime-on-the-solar-coaster/</a>



JOSH GREEN, M.D. GOVERNOR | KE KIA'ĀINA

**SYLVIA LUKE**LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

# STATE OF HAWAII | KA MOKUʻĀINA 'O HAWAI'I OFFICE OF THE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS KA 'OIHANA PILI KĀLEPA

NADINE Y. ANDO DIRECTOR | KA LUNA HO'OKELE

**DEAN I HAZAMA**DEPUTY DIRECTOR | KA HOPE LUNA HO'OKELE

335 MERCHANT STREET, ROOM 310 P.O. BOX 541 HONOLULU, HAWAII 96809 Phone Number: (808) 586-2850 Fax Number: (808) 586-2856

**Testimony of the Department of Commerce and Consumer Affairs** 

cca.hawaii.gov

Before the
Senate Committee on Energy, Economic Development, and Tourism
Thursday, February 1, 2024
1:00 p.m.
Conference Room 229

On the following measure: S.B. 2986, RELATING TO ENERGY RESILIENCY

Chair DeCoite 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.

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

## TO THE SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

February 1, 2024 1:00 p.m.

Chair DeCoite, Vice Chair Wakai, and Members of the Committee:

**MEASURE:** S.B. No. 2986

**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 customergenerator'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.<sup>1</sup>

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 but is significantly higher than interim tariff rates (such as Customer Grid Supply) for exports during the evening peak, including grid service exports. 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. The Commission expects that the new programs, which provide higher export compensation rates than existing programs, will encourage DER adoption and provide fair rates to customers, enabling the important role of distributed energy in Hawaii.

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.

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



### Hawaii Solar Energy Association Serving Hawaii Since 1977

Testimony of the Hawaii Solar Energy Association (HSEA) Regarding SB2986, Relating to Energy Resiliency, Before the Senate Committee on Energy, Economic Development and Tourism

### Thursday, February 1, 2024

Dear Chair DeCoite, Vice Chair Wakai, and committee members,

The Hawaii Solar Energy Association (HSEA) *strongly supports SB2986*, 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 <u>at times when the grid and ratepayers need that energy the most.</u> 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. In fact, customer participation in these programs would represent a negative value proposition for the customer because they would be exporting the energy that they generate and store in their batteries at a lower rate than what it's worth to use it themselves. Instead of creating a program in which solar and battery systems share their energy for the benefit of all ratepayers at times when that energy is needed the most, 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 energy from customer-sited solar and batteries but propose that adjustments can be made later. iii This "after-the-fact fix" will fall



### Hawaii Solar Energy Association Serving Hawaii Since 1977

short for Hawaii ratepayers because it will put into jeopardy customers' willingness to participate in helping HECO with the grid.

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. 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 disruptive closure of the net energy metering program 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 electricity exports that are part of a utility-managed grid service program 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:

"S196269- 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 customergenerator'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."



### Hawaii Solar Energy Association Serving Hawaii Since 1977

<u>Please advance SB2986. Thank you for the opportunity to provide testimony in strong support.</u>

Respectfully,

/s/ Rocky Mould

Rocky Mould
Executive Director

### **About HSEA**

HSEA members include the majority of locally owned and operated renewable energy 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. Since 1977, we've 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.

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. And Hawaii is the faraway leader in adding batteries to rooftop solar systems at 96% of all installs.

<sup>&</sup>lt;sup>1</sup> 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: <u>DER Parties Motion for Reconsideration to Order No. 40418</u>).

<sup>&</sup>lt;sup>ii</sup> 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."

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



### Hawaii Solar Energy Association

Serving Hawaii Since 1977

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.

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).

### Committee on Energy, Economic Development, and Tourism,

### Thursday, February 1, 2024 1:00 PM State Capitol Conference Room 229 & Video Conference

SB 2986

Chair DeCoite, Vice Chair Wakai, and committee members:

On behalf of Nexamp, a developer, owner and operator of customer-sited solar and energy storage projects, I write in **strong support of SB 2986**.

This bill requires retail rate crediting for energy exports enrolled in utility controlled grid services programs. Energy exported to the electrical grid by a customer-generator solar system that is paired with battery storage and a participant in the utility-managed grid service program would be credited at the utility retail rate for the relevant time period.

In light of the growing climate emergency and Hawaii's recent grid outages on multiple islands, SB 2986 will provide grid resiliency that is timely and needed. Requiring a targeted credit for managed energy exports ensures renewable on-site systems are appropriately incentivized to provide reliable power when the grid needs it most.

Without this targeted compensation, on-site generators will be compelled to "sell low and buy high" under current tariff rules. The resulting revenue loss will discourage customer-sited project participation in utility managed grid resiliency programs. Reduced energy exports result in a less dependable, less resilient, and more costly electrical grid for all ratepayers — and in effect fails to adequately take advantage of the export potential of distributed zero-carbon generators deployed to the system. Failure to pass this targeted credit for customer sited exports will also decrease future deployment of distributed, clean generation and reduce public access to the economic and environmental benefits of solar generation and energy storage.

Thank you for your consideration of this important and timely bill and the opportunity to testify.

Please advance SB 2986 to ensure our more affordable and resilient energy transition for all Hawaii ratepayers.

Respectfully,

Kari Smith Nexamp



1050 Bishop St. PMB 235 | Honolulu, HI 96813 P: 808-533-1292 | e: info@hawaiifood.com

### **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
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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, Economic Development

FROM: HAWAII FOOD INDUSTRY ASSOCIATION

Lauren Zirbel, Executive Director

DATE: February 1, 2024

TIME: 1

PLACE: Conference Room 229

RE: SB2986 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.

Chair DeCoite, Vice Chair Wakai, 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.

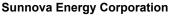
The Hawaii Food Industry Association represents a diverse array of businesses within the food industry, ranging from local grocery stores to food distributors. Our members play a crucial role in the distribution of essential goods and services, especially during emergencies and unforeseen events. As 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.



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



January 31, 2024

Re: Strong support for SB 2986 – Relating to Energy Resiliency

Dear Chair DeCoite, Vice Chair Wakai 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 SB 2986 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. SB 2986 is urgently needed to correct this error at the PUC. SB 2986 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 errored in not making the Battery Bonus program permanent and instead, stripping away reasonable rewards for customers who help the grid at large.

SB 2986 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,

Meghan Nutting, EVP of Government and Regulatory Affairs

Sunnova Energy International

Submitted on: 1/30/2024 3:20:27 PM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Matthew Campbell	Testifying for Discover Energy Systems	Support	Written Testimony Only

### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Best Regards,

Matthew Campbell VP, Sale & Marketing



Legislative Testimony of Sunrun Inc.

Before the EET Committee
February 1, 2024

### IN SUPPORT of SB2986 - Relating to Energy Resiliency

Dear Chair DeCoite, Vice Chair Wakai, and distinguished Members of the Committee on Energy, Economic Development, and Tourism,

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 SB2986, 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 Waiau 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 SB2986 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

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

<u>SB-2986</u> Submitted on: 1/30/2024 6:39:59 PM

Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
laurel brier	Testifying for Kauai Climate Action Coalition	Sunnort	Written Testimony Only

Comments:

Support PV and address the climate crisis

Submitted on: 1/30/2024 7:02:43 PM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
PAUL OREM	Testifying for Photonworks Engineering	Support	Written Testimony Only

### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Paul Orem - CEO Photonworks Engineering.



### SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT AND TOURISM

February 1, 2024 at 1 PM Room 229

### **TESTIMONY IN SUPPORT OF SB 2986**

Aloha Chair Decoite, Vice Chair Wakai, and members of the Committee,

Blue Planet Foundation **supports SB 2986**, which requires retail crediting for energy exports within utility-managed grid service programs.

Blue Planet Foundation is a Hawai'i-based nonprofit organization committed to help Hawai'i cut its carbon emissions and avoid the worst impacts of climate change. Through our advocacy for renewable energy, energy efficiency, and clean transportation, we seek to make our communities stronger, our energy more secure, our environment healthier, and our economy more robust.

Hawaiian Electric's current plan for achieving Hawaiii's 100% renewable energy goal includes power generation from the rooftop of nearly every home across the islands. Over 106,000 homes on Oʻahu, Maui, and Hawaii island¹ and 6,000 homes on Kauaʻi² have already installed rooftop solar. Residential rooftop solar is a proven tool to help homeowners and renters save money and reduces the need for utility investments in the power grid. When paired with batteries, rooftop solar panels can also increase resiliency in neighborhoods, helping homes keep the lights on and communication powered during a blackout.

Blue Planet supports this measure to continue encouraging customer-sited rooftop solar and battery storage energy systems. Incentives such as retail crediting will help to support the deployment of these technologies, which play a critical role in meeting our climate goals, improving grid resiliency, and encouraging more residents to invest in clean energy solutions.

Thank you for the opportunity to provide testimony in support of SB 2986.

https://www.capitol.hawaii.gov/sessions/session2023/Testimony/SB781\_TESTIMONY\_EET-GVO\_02-09-23\_.PDF

<sup>&</sup>lt;sup>1</sup> "Cumulative Installed PV - As of December 2023" *Hawaiian Electric Company*. Accessed January 27, 2024. (hawaiianelectric.com/documents/clean\_energy\_hawaii/clean\_energy\_facts/pv\_summary\_4Q\_2023.pdf)

<sup>&</sup>lt;sup>2</sup> Per KIUC testimony on SB 781 from 2023, page 12, see:

Submitted on: 1/30/2024 8:22:36 PM

Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Ella Aki	Testifying for Sol-Ark	Support	Written Testimony Only

### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Mahalo piha,

Ella Henanipuakea Aki

Sol-Ark RSM, Pacific Islands

(808) 379-3052

Submitted on: 1/31/2024 6:17:45 AM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ryan Hamilton	Testifying for Inception Financial LLC	Support	Written Testimony Only

### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 plan to invest over \$100 Million in the State of Hawaii over the next 2 years. This will drive local job creation, increase local and State tax revenue, and deliver critical energy security and financial savings to thousands of HI residents. This legislation is CRITICAL to ensure our investment commitment can proceed.

Thank you for hearing this critically important bill. Please advance SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Ryan Hamilton

Managing Partner

Inception Financial LLC

Submitted on: 1/31/2024 9:07:43 AM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Chris	Testifying for PV Tech	Comments	Written Testimony Only

### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Submitted on: 1/31/2024 11:19:17 AM Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Marketing Manager	Testifying for PV Tech	Support	Written Testimony Only

Comments:

Aloha Chair DeCoite, Vice Chair Wakai, and esteemed committee members,

I'm reaching out with warm aloha to express my enthusiastic support for SB2986, focused on Energy Resiliency. This bill suggests embracing retail crediting for energy exports within utility-managed grid service programs. Without proper crediting at the retail rate, there's a risk of dampening enthusiasm and discouraging community participation in these essential initiatives. This not only hinders the development of innovative services but also jeopardizes the reliability, adaptability, and affordability of our electrical grid. Moreover, it might limit the community's access to the positive impacts of solar and energy storage, potentially causing a downturn in the vibrant solar market.

I kindly ask for your support in advancing SB2986 to contribute to a more affordable and resilient energy transition that embraces the spirit of aloha for all ratepayers.

With aloha,

Marketing - PV Tech

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 Honolulu

> Chamber of Sustainable Commerce P.O. Box 22394 Honolulu, HI 96823

Sen. Lynn Decoite, Chair Sen. Glenn Wakai, Vice Chair Comm. on Energy, Economic Dev. & Tourism

Thursday, February 1, 2024 1:00 pm Via Videoconferencing



RE: SB2986 RETAIL CREDITING FOR RENEWABLE ENERGY - SUPPORT

Dear Chair Decoite, Vice Chair Wakai & 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 SB2986, 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.

Submitted on: 1/31/2024 11:59:42 AM Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Patrick Sterns	Testifying for SunPower Corporation	Support	Written Testimony Only

### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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.

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.

Thank you for hearing this critically important bill. Please advance SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Patrick Sterns

Director, Policy and Strategy

SunPower



To: The Senate Committee on Energy, Economic Development, and Tourism (EET)

From: Sherry Pollack, 350Hawaii.org
Date: Thursday, February 1, 2024, 1pm

### In strong support of SB2986

Aloha Chair DeCoite, Vice Chair Wakai, and members of the EET Committee,

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 SB2986** that requires full retail rate credit 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. **SB2986** 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.

In testimony for the companion measure, HB1687, HECO asserted that "providing retail crediting exacerbates concerns about equity and affordability" and that retail crediting would significantly increase the cost of Hawaiian Electric's grid services program. However, this is factually inaccurate. To the contrary, increasing deployment of solar and storage helps *decrease* costs for other rate payers.

It must be noted that this "cost shift from solar to non-solar customers" myth can be traced to persistent public relations efforts by utility lobbying associations. Repeated studies have shown *rooftop solar provides a net benefit to all ratepayers and the public*. Utilities should encourage more people to adopt rooftop solar, not spread misinformation that discourages it.

By providing fair compensation to customers who generate their own electricity from solar power and send the electricity they are not 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

<sup>&</sup>lt;sup>1</sup> For example, see: "N.A.A.C.P. Tells Local Chapters: Don't Let Energy Industry Manipulate You" by Ivan Penn. NY Times. Jan. 5, 2020.

<sup>&</sup>lt;sup>2</sup> Examples include: "SEIA finds rooftop solar is worth 24¢/kWh in Michigan"; "Rooftop solar in Indiana worth 13¢/kWh, not 3¢/kWh, says expert witness"; "Study finds Utah Solar Customers Provide over 14 times the value proposed by Rocky Mountain Power"; "Rooftop solar: Net metering is a net benefit"; "Minnesota's Value of Solar"; "Maine PUC study values solar at 33 cents/kWh, more than double the price of utility power"; "The True Value of Solar."

the bottom up. But we need to *fairly* compensate customers who generate local sustainable electricity, sending this clean energy back to the grid when energy is at peak demand. These are critical investments that will help us meet our clean energy goals.

Rooftop solar has been a driver of Hawaii's clean energy progress over the years. Distributed solar adds value, not extra costs. Providing incentives for 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 don't be swayed by disingenuous arguments that clearly prioritize shareholders over the community. We urge you to do what is best for families throughout Hawaii and pass **SB2986**.

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

Sherry Pollack Co-Founder, 350Hawaii.org



"Helping Hawaii Go Green, One Roof at a Time"

Solar Services Hawaii 98-121 Kihale Pl. Aiea, HI 96701

31 January 2023

RE: Support for SB2986, retail crediting for grid service exports

Aloha Chair DeCoite, Vice Chair Wakai, and committee members,

My name is Laurence Ponce, owner of Solar Services Hawaii, a solar installation company working towards 100% renewable energy capacity in Hawaii.

I strongly support SB2986, 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 rates discourages customers from participating in and fully benefiting from Hawaii's vital renewable energy programs.

Decreased incentives only creates yet another hurdle to achieving 100% renewable energy capacity, ultimately leaving Hawaii with a less dependable, less resilient, and more costly electrical grid.

As a long-standing member of Hawaii's solar industry, I have witnessed first-hand the benefits of retail crediting for grid service exports. Please advance SB2986 to ensure a more affordable and resilient energy transition for all ratepayers.

Thank you for hearing this critically important bill for Hawaii's clean and resilient energy future, and for giving me the opportunity to provide testimony.

Respectfully,

Laurence Ponce

Som Amer

Submitted on: 1/31/2024 1:02:22 PM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Dave Mulinix	Testifying for Greenpeace Hawaii	Support	Written Testimony Only

### Comments:

Aloha Chair DeCoite, Vice Chair Wakai, and EET Committee Members,

I am CoFounder of the Hawai'i chapter of Greenpeace, the largest environmental organization in the world, with an international membership of over 3 million.

On behalf of Greenpeace Hawai'i's thousands of members statewide we Stand in STRONG SUPPORT of SB2986 that requires full retail rate credit for participating customers to ensure that they are fairly compensated for using their solar and battery systems to support the utility grid. This is important because 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.

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

Mahalo for your kind attention, please pass SB2986.

Dave Mulinix, CoFounder, Greenpeace Hawai'i



Submitted on: 1/31/2024 2:48:09 PM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Marc Monbouquette	Testifying for Enphase Energy, Inc.	Support	Written Testimony Only

### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, relating to Energy Resiliency, which requires retail crediting for energy exports from customer-sited distributed energy resources 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully submitted,

Marc Monbouquette, Enphase Energy







Testimony of Alan Lennard Managing Director of Green Power Projects LLC e-mail: alan.lennard@greenpowerprojects.com

#### In STRONG SUPPORT of SB2986 RELATING TO ROOFTOP SOLAR INSTALLATION

#### Before the

THE SENATE KA 'AHA KENEKOA
THE THIRTY-SECOND LEGISLATURE REGULAR SESSION OF
2024 COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM
Senator Lynn DeCoite, Chair Senator Glenn Wakai, Vice Chair

Thursday, February 1, 2024 1:00 PM PLACE Conference Room 229 & Videoconference State Capitol 415 South Beretania Street

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

My name is Alan Lennard. I am the Managing director of Green Power Projects LLC. Green Power Projects LLC is a Solar project facilitation company working towards 100% Renewable Energy capacity in Hawaii. Our vision is a Hawaiian energy economy based 100% on renewable sources indigenous to Hawaii.

#### **I STRONGLY SUPPORT SB2986.**

I write in strong support of SB2986, 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.

Hawaii needs renewable energy now more than ever. Retail crediting for energy exports within utility-managed grid service programs allows the state's progress towards 100% renewable energy, and makes us all less vulnerable to the effects of climate change.

Please advance SB2986 to ensure our more affordable and resilient energy transition for all ratepayers. Respectfully,

Thank you for supporting clean solar energy and giving me the opportunity to testify.

#### Alan Lennard -dig signature

Alan Lennard Managing Director Green Power Projects LLC P.O. Box 818 Haleiwa, HI 96712-0818



Submitted on: 1/31/2024 6:52:23 PM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Christopher Dean	Testifying for Recycle Hawaii, Clean The Pacific	Support	Written Testimony Only

#### Comments:

#### **Considering Incentive Programs**

We know the job of legislators is to balance the desires and needs of many different constituents, some of which may be conflicting. In rare times of crisis, it may be necessary for legislators to make difficult decisions that may seem out of balance to some of the constituents. Now is such a time

After hearing the testimony on behalf of HECO on Tuesday, it's clear that, although they claim to understand the seriousness of the situation, they in fact do not understand the dire consequences that are already unfolding, due to the climate crisis.

#### Here are some facts to consider:

The scale of the crisis is global. The size of the physical properties are so enormous, it's impossible for humans to comprehend. The climate crisis has momentum, like trying to change the course of a gigantic ship, it takes time. Consider how long it took to create all the ice we have on this planet, thousands of years. We are not going to be able to fix this with technology after the damage is done. We are not going to be able to engineer our way out of this. Some choices we make, can not be undone. If you kill a person, there's no undoing that, it can't be fixed. Such is the situation with the climate crisis, except we're talking about the lives of billions of people, not to mention all the other beautiful organisms that also inhabit this planet. The solution isn't fix the problem, it's prevent the problem.

it may already be too late. To say that we have to act quickly is a record setting understatement. Let's face it, HECO does not want to relinquish control of the grid to the citizens of Hawai'i. They have squandered decades of precious time trying to delay the inevitable. If you have sympathy for HECO, it's misplaced. Your sympathy should be to the millions of people who are already suffering and the billions of people yet to suffer. On the PBS NewsHour, they talked about the Panama Canal having to limit passage for the first time in its history, due to the record setting drought. You know it's serious when commerce is forced into disruption. This is one of thousands of examples, and this is just the very beginning. Even if we stopped burning all fossil fuels tomorrow, the situation would continue to deteriorate for decades, if not centuries.

When HECO stopped net metering, that stopped solar in its tracks. I remember when we had net metering. I was so hopeful back then, because I could see everyone was putting solar on their roof. Now, I'm so depressed that I can barely go on. Here's the single most important fact. As a legislator, you MUST transition to solar as fast as possible and the fastest way to reach 100% solar is this bill right here; SB 2986.

Imagine what will happen when the citizens of Hawaii realize that not only can they completely offset their electric bill, but with enough capital outlay, they could actually make money selling electricity to the grid. The transition to solar will be astonishingly fast. We would easily be 100% solar before 2030 if you pass this bill.

You will be heroes in the history books. You'll be in the global news. Hawaii will be a model for the entire world, especially when they see what happens when the citizens make so much electricity, that we have a glut of energy. You think the standard of living is high in Saudi Arabia or Dubai, wait until you see what happens when our economy has unlimited and practically free energy in perpetuity. We'll be exporting all kinds of things, including truly green hydrogen through hydrolysis. You could build sewage treatment plants and instead of dumping the waste water in the ocean, you could make hydrogen. There's no limit to what could be done and all you have to do is pass this bill.



February 1, 2024

Senator Lynn DeCoite Senate Committee on Energy, Economic Development, and Tourism



**RE:** SB2986 – RELATING TO ENERGY RESILIENCY

Hearing: Thursday, February 1, 2024, 1:00 p.m.

**Position: IN STRONG SUPPORT** 

Chair Decoite, Vice Chair Wakai, 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 SB2986**, 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. 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 SB2986. 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

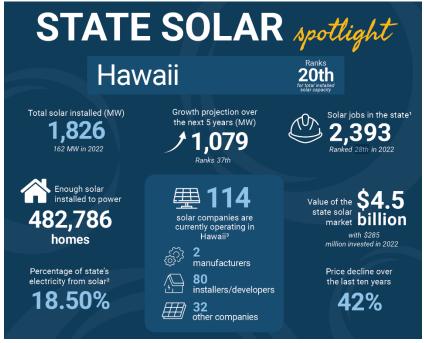


Figure 1: Image Courtesy of Solar Energy Industries Association

product forecasts, and companies built around supporting the rooftop solar industry are predicting a market downturn. As a result, the state <u>will see less tax revenue</u>, less employment, and less economic growth.

<sup>&</sup>lt;sup>1</sup> See <a href="https://www.seia.org/state-solar-policy/hawaii-solar">https://www.seia.org/state-solar-policy/hawaii-solar</a>



The legislature and this committee have an opportunity to protect the local solar industry by passing crucial legislation like SB2986.

As a local, employee-owned solar business owned and operated in Hawaii for over 40 years, we again express our **STONG SUPPORT for SB2986** 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



# TESTIMONY BEFORE THE SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

#### **SB 2986**

#### **Relating to Energy Resiliency**

Thursday, February 1, 2024 1:00 pm, Agenda Item #1 State Capitol, Conference Room 229 & Videoconference

Kaiulani Shinsato
Director, Customer Energy Resources Programs
Hawaiian Electric

Chair DeCoite, Vice Chair Wakai, and Members of the Committee,

My name is Kaiulani Shinsato and I am testifying on behalf of Hawaiian Electric in opposition to SB 2986, 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 customergenerator'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 SB 2986. Thank you for this opportunity to testify.



# INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL UNION 1260 EMPOWERING THE PACIFIC

#### SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

HEARING DATE: Thursday, February 1, 2024

TIME: 1:00 p.m. PLACE: State Capitol

Conference Room 229

RE: Testimony in Opposition- Senate Bill 2986

Aloha Honorable Chair DeCoite, Vice Chair Wakai, and Members of the Committee;

The International Brotherhood of Electrical Workers Local 1260 (IBEW 1260) would like to respectfully offer the following testimony in Opposition to House Bill 1687.

IBEW 1260 is comprised of approximately 3,000 members representing Hawaii's electric utility companies as well as Government Service Contracts throughout Hawaii, Guam, and Wake Island. Our members are a diverse local workforce of dedicated, highly skilled, and trained individuals working 24 hours a day, 7 days a week, to generate, transmit, and distribute electricity throughout Hawai'i and to ensure the reliability of this precious resource.

IBEW 1260 respectfully opposes Senate Bill 2986 which seeks to require retail crediting for energy exports enrolled in grid services programs, whereby energy exported to the electrical grid past a participating customergenerator's point of common coupling from photovoltaic solar systems paired with battery storage as a part of a utility-controlled grid service program would b credited at the full retail rate of electricity for the relevant time period.

Senate Bill 2986 seeks to address an issue that was fully vetted by stakeholders and decided on by the PUC pursuant to Docket No. 2019-0323 relating to Distributed Energy Resources via Decision and Order No. 40418. In addition, IBEW 1260 is concerned that such legislation will create a disparity between ratepayers and unjustly burden those who may be unable to participate due to financial constraints.

Mahalo for the opportunity to testify on this important matter, we look forward to working with you going forward.



## Testimony Before the Senate Committee on Energy, Economic Development and Tourism

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

Thursday, February 1, 2024; 1:00 pm Conference Room #229 & Videoconference

#### Senate Bill No. 2986 - RELATING TO ENERGY RESILIENCY

To the Honorable Lynn DeCoite, Chair; Glenn Wakai, 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 rates in Hawai'i. KIUC currently has 124.7 megawatts of solar generating capacity, roughly 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 added 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 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's grid 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, is not based on economic justification as the benefits to the grid do not justify the payment amount, and 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 Hawaii Public Utilities Commission be directed to commission 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.

Submitted on: 1/30/2024 5:59:53 PM

Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
James Rudolph	Individual	Support	Written Testimony Only

#### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

A concerned voter and human;

James B. Rudolph

Submitted on: 1/29/2024 9:21:57 PM

Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Arianna Feinberg	Individual	Support	Written Testimony Only

#### Comments:

Please support this bill as it will increase the adoption of solar energy and storage. We need to reduce greenhouse gas emissions to fight climate change. Thank you!

<u>SB-2986</u> Submitted on: 1/29/2024 9:35:59 PM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ninon Rynerson	Individual	Support	Written Testimony Only

### Comments:

Sb2986 will motivate more people to see they can afford solar by increasing incentives thank you

<u>SB-2986</u> Submitted on: 1/30/2024 11:21:45 AM Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Dyson Chee	Individual	Support	Written Testimony Only

## Comments:

Mahalo for the opportunity to testify in support of SB2986!

Submitted on: 1/31/2024 7:33:59 AM

Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	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 Mōʻiliʻili. I'm writing in STRONG SUPPORT of SB2986.

me ke aloha 'āina,

Nanea Lo

Submitted on: 1/31/2024 8:23:35 AM

Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Maki Morinoue	Individual	Support	Written Testimony Only

Comments:

Aloha,

**I strongly support SB2986**, 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 why we should support it, so I will urge you to listen to the experts, and I support this bill!

Mahalo Maki Morinoue Hōlualoa 96725

Submitted on: 1/31/2024 8:51:41 AM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ryan Smith	Individual	Support	Written Testimony Only

#### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Submitted on: 1/31/2024 9:28:37 AM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ronald "Ron" Reilly	Individual	Support	Written Testimony Only

#### Comments:

Dear Chair Lynn DeCoite, Vice Chair Glenn Wakai, and members of the Committee On Energy, Economic Development, and Tourism,

Thank you for hearing SB2986 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 customergenerator'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.

Experience has shown that 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

Submitted on: 1/31/2024 11:06:50 AM Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Roy Skaggs	Individual	Support	Written Testimony Only

#### Comments:

Aloha, Chair DeCoite, Vice Chair Wakai, and committee members,

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Mahlao!

Roy Skaggs

Submitted on: 1/31/2024 11:27:59 AM Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Jeff	Individual	Support	Written Testimony Only

#### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Aloha, Jeff Lum

856 Nana Honua St

Honolulu, HI 96825

Submitted on: 1/31/2024 11:42:35 AM Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Lori Ann Saunders	Individual	Support	Written Testimony Only

#### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully, Lori Ann Saunders

Submitted on: 1/31/2024 12:28:13 PM Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
L. Osterer	Individual	Support	Written Testimony Only

#### Comments:

I strongly support this bill, SB2986, to justly reward 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 Hawai'i 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

Submitted on: 1/31/2024 12:02:57 PM Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Justin Furuta	Individual	Support	Written Testimony Only

#### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully,

Justin Furuta

Submitted on: 1/31/2024 12:55:50 PM Testimony for EET on 2/1/2024 1:00:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Radford Nakamura	Individual	Support	Written Testimony Only

#### Comments:

Dear Chair DeCoite, Vice Chair Wakai, and committee members:

I write in strong support of SB2986, 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 SB2986 to ensure our more affordable and resilient energy transition for all ratepayers.

Respectfully, Radford Nakamura

Submitted on: 1/31/2024 1:01:40 PM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Bill Bugbee	Individual	Support	Written Testimony Only

#### Comments:

IN FAVOR OF SB2986 -- The widespread adoption of Rooftop solar power is key to Hawaii's successful transition to clean energy and "effectively" address the social and economic rising statewide costs of climate change and the associated global heating on the state and the world. SB2539 is further critical to advancing energy equity for the state's residents invested in rooftop solar and the stateside benefits of reducing and eventually eliminating fossil fuels and utility-delivered combustion energy electricity sources contributing to rising energy costs to ratepayers, and statewide climate costs to taxpayers.



<u>SB-2986</u> Submitted on: 1/31/2024 1:25:03 PM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Buren Shen	Individual	Comments	Written Testimony Only

#### Comments:

Please we need to get past this legislative session or our industry will tank.



Submitted on: 1/31/2024 7:18:10 PM

Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Diane Ware	Individual	Support	Written Testimony Only

#### Comments:

Dear Chair and Committee Members,

I am in strong support of this bill. 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.

Respectfully,

Diane Ware 99-7815 Kapoha Volcano 96785

<u>SB-2986</u> Submitted on: 1/29/2024 4:21:02 PM Testimony for EET on 2/1/2024 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Regina Gregory	Individual	Oppose	Written Testimony Only

#### Comments:

This will increase the price the rest of us must pay