THE SENATE
THIRTY-SECOND LEGISLATURE, 2024
STATE OF HAWAII

# S.B. NO. 2986

JAN 24 2024

# A BILL FOR AN ACT

RELATING TO ENERGY RESILIENCY.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

SECTION 1. The legislature finds that Hawaii has become a global leader in the installation of customer-sited, distributed energy resources such as rooftop solar and battery energy storage. As of December 2022, the Hawaiian Electric service territories achieved a renewable energy portfolio standard of 31.8 per cent of total electricity generation, with the majority, forty-seven per cent, coming from customer-sited rooftop solar systems. Kauai Island Energy Cooperative service territories achieved a renewable energy portfolio standard of 60.2 per cent of total electricity generation, with twenty-one per cent of that total coming from customer-sited rooftop solar systems.

According to the United States Department of Energy funded, Berkeley Labs, ninety-six per cent of all residential rooftop solar installations in Hawaii now include battery storage. Nevada, the next closest state, is only at twelve per cent. In addition to lowering customer and grid electricity costs and

helping balance supply and demand for energy throughout the day, when combined, solar and battery storage are a powerful provider of resilience by allowing residents and businesses to "ride through" grid outages and provide clean and reliable sources of power during weather-related or other emergencies.

Distributed energy resources can also be used to provide grid services through utility controlled and dispatched programs. Hawaiian Electric's battery bonus program enrolled forty megawatts on Oahu to provide emergency energy capacity in response to the closing of the AES coal plant. A comparable program on Maui totals more than six megawatts.

In the aftermath of the catastrophic Maui wildfires, Hawaii's solar industry, in partnership with emergency responders, charities, and other non-governmental organizations, rapidly mobilized for response and recovery efforts. Within days, resilient power systems consisting of photovoltaic solar and energy storage were set up at ad hoc or planned distribution hubs at Napili park, Pohaku park, and numerous other locations. These systems provided, and in some cases, still provide, vital sources of electricity to serve the people of west Maui. Solar plus storage systems powered Starlink and other Wi-Fi

communication networks, refrigeration trucks, and lighting systems to support the response effort and distribute food, water, and other critical services with clean, quiet, and emissions-free electricity in a time of need. These emergency response efforts:

(1) Deployed eighteen distributed microgrids powered by solar and energy storage;

(2) Assessed twenty-four potential sites;

(3) Served over one thousand three hundred people per day at partner sites;

(4) Installed over one hundred kilowatts of distributed solar capacity and three hundred eighty kilowatt-hours of storage capacity; and

(5) Built over $600,000 of grounded value installed.

Going forward, on-site solar and battery storage or distributed energy resources can play a critical role in not only rebuilding the west Maui grid but also providing resilient and affordable power across the entire State if properly funded and supported. With increasing risk of weather- and climate-related extreme events, such as the hurricane-induced high-winds that knocked out Hawaiian Electric's transmission and

distribution system on August 8, distributed energy resources offer a relatively cost-effective option for building resiliency and reliable power systems. Distributed energy resources installed in communities can work in conjunction with power shut-off plans and avoid high-cost investments in underground transmission and distribution lines. Resilience hubs with clean and quiet distributed power systems, coordinated microgrids, and community-based assets are other powerful options that can aid Maui and the State going forward.

The purpose of this Act is to:

(1) Ensure deployment of solar plus storage systems by providing fair compensation for distributed energy exports enrolled in grid services programs; and

(2) Incentivize customer investments in resiliency that benefit the entire electric grid.

SECTION 2. Chapter 196, Hawaii Revised Statutes, is amended by adding a section to part II to be appropriately designated and to read as follows:

"§196- **Retail crediting for solar and battery storage energy exports.** Notwithstanding any law, rule, or ordinance to the contrary, energy exported to the electrical grid past a

participating customer-generator's point of common coupling, including metered exports, from photovoltaic solar systems paired with battery storage as part of a utility-controlled grid service program shall be credited at the full retail rate of electricity for the relevant time period. In addition to the retail credit for grid service exports, the commission shall establish compensation values for resiliency, capacity, and ancillary services."

SECTION 3. New statutory material is underscored.

SECTION 4. This Act shall take effect upon its approval.

INTRODUCED BY: Lynn DeCoite

# S.B. NO. 2986

**Report Title:**
Renewable Energy; Distributed Energy Resources; Retail Crediting; PUC

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

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