



When the going gets tough...

Over six months into the COVID-10 pandemic, we're still seeing continued high levels of customers deciding to go solar. This is a testament to a resilient and strong solar industry in Hawai'i.

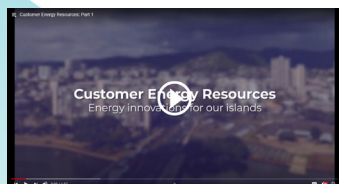
Our Customer Energy Resources (CER) team at Hawaiian Electric has been doing what we can to help the industry and our customers through these tough times. This newsletter highlights many of those improvements.

As of September, across our five-island service territory, we have executed 4,759 rooftop solar applications in all programs for 2020, compared to just 3,684 applications for all of 2019. This is an 88 percent increase over where we were at the same time last year.

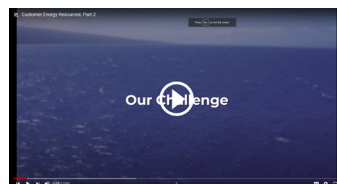
Even with no clear end to pandemic impacts in sight, we're still hoping for higher numbers of applications for the remainder of the year, mirroring the experience of 2019.

Our statistics show that 42 percent of new applications are for Customer Grid-Supply Plus, followed by Smart Export at 28 percent. Overall, more than 70 percent of new applications include battery storage, which is most welcome.

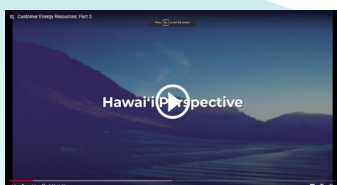
To promote continued growth of customer energy resources by our customers, we made a series of videos that are available on our website at the link below. The videos not only explain our programs, but also the challenges we face, our innovation in finding solutions, and *why* we are pushing so hard to break down barriers and continue to lead in renewables integration. Please check them out. We hope they inspire you. Check here:



[Customer Energy Resources: Part 1](#)



[Customer Energy Resources: Part 2](#)



[Customer Energy Resources: Part 3](#)

Grid service delivered by CER

In July, Hawaiian Electric submitted two contracts to the Public Utilities Commission for review that would provide various grid services delivered by customer energy resources, such as residential storage systems. Through a competitive selection process, Hawaiian Electric contracted with Swell Energy LLC and Open Access Technology International Inc. (OATI) for five-year contracts delivering up to 87 megawatts of different types of grid services on O'ahu, Maui, and Hawai'i island.

These Grid Service Purchase Agreements, if approved by the commission, would be the second and third contracts for grid services utilizing customer resources. The first GSPA contract, awarded to OATI for delivering up to 20MW of grid services, was approved by the commission in August 2019 and is currently in its first year of customer enrollment. In total, these contracts represent significant progress for the demand response efforts of our team.

Welcome home, Ian



We are happy to welcome home Ian Morikawa, Customer Energy Resources manager. Ian is also a Naval Aviator in the Navy Reserves and was deployed to Bahrain and throughout the Middle East in July 2019.

As a member of Task Force 51/5 he conducted contingency operations, maritime security, crisis response, and security cooperation operations in support of U.S. Central Command through August 2020. Most notably he directed Task Force 51/5 crisis response actions following the breach and attack by protestors into the Baghdad Embassy compound on Dec. 31, 2019.

We are glad to have Ian back — safe and sound — and thank Tanay Panalal for “holding down the fort” while Ian served his country overseas.

Is community solar an opportunity for you?



We are in the midst of launching our second phase of Community-Based Renewable Energy (CBRE), frequently called “community solar.” Unlike the first phase, which was limited to 8 megawatts, this phase will be open to 235plus MW of renewable generation across our islands.

The second phase places special emphasis on opportunities to participate for low-to-moderate income residential customers and small businesses and organizations. There’s a wide variety of project sizes possible, including smaller ones on rooftops, over parking lots, or on small open plots.

The main goal of community solar is to provide an opportunity for apartment dwellers, renters, and small businesses and organizations that may not be able to participate in one of our CER programs to be part of the solar movement and save money on their electric bills. Additionally, we believe community solar provides a huge opportunity to create jobs and more work to contribute to the economic recovery of Hawai‘i, as well as advance our progress toward 100 percent renewable energy.

We are looking for local organizations that can serve as Subscriber Organizations to contact us to learn about recruiting their members as subscribers and help them save money. Some local organizations with a mission to help those in need could even become “anchor tenants” in community solar projects.

You will be hearing more about community solar opportunities in the months ahead. We hope you will consider whether this is a viable opportunity for you. Among other ways Hawaiian Electric can help, we have information from owners of land or rooftops who might host a project and we are compiling a list of industry experts who might help a developer or an organization get started. Please stay tuned and check out our website for more information in the near future.

Revenue meter replacement progress



We’d like to provide an update on the progress we’ve made regarding early meter replacements. We’ve committed to replacing customers’ revenue meters earlier in the interconnection process to support early energization and quicker execution of the agreement.

Since May, we’ve completed over 1,800 meter replacements on O’ahu. This includes projects in validation status, projects that received conditional approval in 2020 and requests made by contractors using priority lists. We will continue to actively work on meter replacements for validation and new conditionally approved projects. Please continue to send us priority lists if you have a customer conditionally approved prior to 2020 in need of an early revenue meter replacement.

Customer Grid Supply Plus and Smart Export milestones

In early September, we informed the Public Utilities Commission that the Customer Grid-Supply Plus program had reached 50 percent of its capacity limit, based on conditionally approved applications for Hawai‘i Island, Maui County, and O’ahu. In addition, capacity for the Smart Export program on Hawai‘i Island has also reached its 50 percent threshold.

Please see below for more details on the currently available capacity for the Grid-Supply Plus and Smart Export programs.

Territory	Program	Program Capacity (MW)	Submitted (MW)	Approved (MW)	Executed (MW)	Remaining (MW)
Hawai‘i Island	CGS Plus	12	.12	1.76	4.61	5.51
	Smart Export	10	.09	1.97	3.78	4.16
Maui County	CGS Plus	7	.22	1.82	1.83	3.13
	Smart Export	5	.28	1.55	.44	2.73
O’ahu	CGS Plus	35	1.00	10.67	13.58	9.75
	Smart Export	25	.18	5.02	6.53	13.27

Figures are current as of August 2020

For both programs, even after the program caps are met, applications will still be accepted, and customers in queue will be admitted to the program as space becomes available to the extent previous applications are cancelled.



Contractor news and reminders

Streamlining Customer Grid-Supply Plus meters

Beginning Dec. 1, 2020, Hawaiian Electric will no longer install utility-owned production meters for Customer Grid-Supply Plus (CGS+) customers on O'ahu. Hawaiian Electric has been installing net meters in the interim until smart meters become available. To make the interconnection process more efficient, Hawaiian Electric is eliminating this step.

Instead, Hawaiian Electric will now require contractors to install any UL-listed meter socket jumper cover or temporary non-utility production meter in the second meter socket for CGS+ customers on O'ahu only. We believe this process improvement should have the benefit of streamlining the process for customers, contractors, and Hawaiian Electric.



A sample photo of a meter socket jumper cover

To take advantage of this improvement, contractors will need to submit a waiver form, the same form you were asked to submit relating to the installation of temporary CGS+ meters. If you have already submitted this form, there is no need to submit again. If you have not already done so, please submit the form. If you need the form or have any questions, contact us at connect@hawaiianelectric.com or (808) 543-4760.

Simplified authorization and acknowledgement

We have changed our process relating to the Customer Authorization & Acknowledgement Form. Previously, a customer's signature could be submitted electronically, with additional documentation and customer verification, or as an actual "wet" signature with no additional documentation. Now, to ease the process for customers and contractors, we have changed signature requirements as follows:

1. An electronic customer signature is acceptable, and no additional documentation or customer verification is required. Electronic signatures can be completed via an iPad, using Adobe Pro, DocuSign, or similar method.
2. Actual "wet" signatures will continue to be accepted.

Early energization with activation of Volt-Watt

Beginning June 15, we asked that all validation submittals include screenshots showing the Volt-Watt function activated, unless you indicate you will energize after receiving Permission to Operate. Activating the Volt-Watt function allows the customer to energize a system immediately after the building permit and meter replacement are completed. Activation of the Volt-Watt function will be verified

at validation. Please note that we may need additional inverter screenshots that capture the specific set points or updated inverter firmware version, depending on the inverter manufacturer.

The Volt-Watt function does not need to be activated if a customer does not wish to energize prior to PTO. We ask that you include a statement in the validation submittal that says, "This system will not be energized until PTO is received and therefore does not have Volt-Watt activated." This should be included in the Inverter Compliance Upload Field or the General Comments Section of the validation submittal.

Simplified validation requirements

In August, as a part of continuous process improvement, we changed requirements on a trial basis for smaller systems (25kW or less). We now only require proof that the electrical inspection portion of the building permit has been completed, not the complete building inspection. We are trying this until Nov. 11, 2020, when we will evaluate the change. We will continue to accept a fully closed building permit.

If you choose to submit proof of only the electrical inspection, please be sure to include documentation of the building permit number, service address, description of the work, and the date the inspection was completed. All other validation requirements remain unchanged; please continue to submit normal photos, screenshots, and/or documentation.

Check your inventory; a change is coming (but not right away)

Starting in January 2022 (15 months from now), all applications for any Customer Energy Resource program will need equipment certified to the latest version of IEEE 1547-2018, *IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces*. This latest version recognizes the advancements in inverter technology and will allow continued interconnection of new systems certified to this standard and help prepare systems for the future of solar in Hawai'i.

We've worked closely with inverter manufacturers, statewide customer energy resource stakeholders, and the Interstate Renewable Energy Council to harmonize our requirements with the latest IEEE standard and reduce the risk of any inverter market disruption. Once we officially start requiring only systems certified to this new standard in **January 2022**, we will update our Qualified Equipment List online and the list seen in our Customer Interconnection Tool.

Hawaiian Electric
808.543.4760

Connect@HawaiianElectric.com

Hawaiian Electric - Maui County
808.871.8461 ext. 2445

ConnectMauiCounty@HawaiianElectric.com

Hawaiian Electric - Hawai'i Island
808.969.0358

ConnectHawaiiIsland@HawaiianElectric.com