Distributed Energy Resources

## Connected



January 2018

#### Changes coming to Qualified Equipment List for advanced inverters



Beginning in January, contractors will notice a significant change in the Qualified Equipment List posted weekly on our website. That's because the list will be limited to inverter makes and models from manufacturers that have notified the Hawaiian Electric Companies of their intentions to be formally certified or self-certified to perform certain grid support functions pending final approval in Rule 14H.

The Companies have been working for many months with manufacturers on these impending changes and we appreciate those that have already submitted their documentation. Inverter manufacturers are required to provide updated information on the correct firmware version, country code, or applicable inverter configuration needed to meet the required Volt-VAR and Frequency-Watt Grid Support Utility Interactive ("GSUI") functions.

All qualified GSUI inverters must be formally certified or self-certified by March 10, 2018 and submit the completed forms to Hawaiian Electric to remain on the Qualified Equipment Lists. Please note that this applies to all inverters in the PV system, including those that are part of a storage system. Here's a link

to the details of what's required for manufacturers: <u>Grid Supportive Utility-Interactive Inverter Certification</u> <u>Requirements.</u>

Although we have received updates from many inverter manufacturers, there are a number of inverter models that remain unspoken for with no updated information provided to Hawaiian Electric and have been previously identified on our list as "No Information Submitted". Going forward, in an effort to simplify the list, only inverter models with "Hawai'i SRD V 1.0", "Hawai'i SRD V1.1", or "Self Certification v1.1" will remain on the Qualified Equipment List.

The allowable equipment specified on the Qualified Equipment List applies to new applications received by the Companies. Applications that received Conditional Approval using equipment that is no longer on the list are not required to replace their inverters unless identified for voltage mitigation measures in lieu of an Interconnection Requirements Study. Applications that include inverters that cannot perform Grid Support Functions will be required to submit a revision prior to receiving Conditional Approval.

Contractors who no longer notice their preferred inverters on the Qualified Equipment List should contact the manufacturer for additional information about whether they intend to certify. The list is updated weekly and we expect additional equipment to be added as information is received from manufacturers.

### **Customer Interconnection Tool upgraded**

The Customer Interconnection Tool (CIT) has been recently upgraded to provide additional functionality and flexibility for contractors and customers submitting revisions and change of contractor requests.

The property owner or the new contractor may initiate a change of contractor request as long as the application

is in the pending installation (PI) or pending verification (PV) status as noted on the Integrated Interconnection Queue and there are no revisions currently in process. Revisions that are pending approval will have to either be deemed incomplete or approved by the processor before initiating a contractor change request through CIT.



These requirements only apply to the online tool. If you would like to submit a change of contractor request while the application is not in PI or PV, please contact our office for assistance. All Change of Contractor requests require a signed Customer Authorization form and updated drawings with the new contractor identified. The customer will be notified via email that the request has been submitted and whether or not it has been approved. Once accepted, the new contractor will be required to submit revisions to update the application with new system component data, drawings and other applicable information.

Among the other improvements, the recent upgrade also allows you to save partially finished revisions and complete them later, and automatically calculates program size after all of the system components are entered.

We're now working on the programming necessary to support the addition of the new programs in the CIT. So, if you haven't already done so, please set up your business and/or contractor account in the tool so that you can become familiar with its many benefits before the new programs are launched in 2018. You can find training and informational resources on our website and if you would like to schedule a training session for your team, please send an email to <code>iip@hawaiianelectric.com</code>.

#### Revision Requirements for Pending Applications



Revisions happen. All. The. Time. So, here are a few things to remember to make the process run smoothly for all involved.

A revision is complete when it proposes a change that is acceptable for that program and we are provided all of the pages we need to create a new, complete agreement showing the updated information.

What do we need?

- ☑ A cover form;
- ☑ All new pages if there's a change of contractor;
- ☑ Otherwise, only the pages that reflect the changes need to be updated.
- ☑ Updated drawings reflecting the changes, including change of contractor if applicable.
- ☑ Updated spec sheets if applicable.
- ☑ Reminder! NEM increases require a justification.

### Can processors mix and match pages from previous complete and incomplete agreements to create a complete agreement?

Yes, as long as the contractor and form versions are the same. The combined agreement must be consistent and preserve the intent of the revision.

#### Can processors make minor corrections on the agreement?

No, since it is a contract, processors can't make corrections by hand. They must replace pages to correct minor administrative errors. The use of "White Out" is also not allowed by anyone since it is a contract.

Can processors make minor corrections on applications forms such as those used in the CIT?

Yes, with your permission.



# Reminders: Certificate of Insurance requirements for Customer Self-Supply and Customer Grid Supply are different.

The Certificate of Insurance requirements are different for CSS and CGS. If the program size of a CGS project exceeds the 10 kW minimum total rated capacity of the generating facility, insurance coverage is required whereas this minimum program size is 16 kW for CSS. For more information on Rule No. 22 and Rule No. 23 please visit our website at:

https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/hawaiian-electric-rules

Customer Self Supply (Rule No. 22)	
Commercial General Liability Coverage Amount	Total Rated Capacity of the Generating Facility
\$1,000,000	Greater than 30 kW and less than or equal to 100 kW
\$500,000	Greater than 16 kW and less than or equal to 30 kW

Customer Grid Supply (Rule No. 23)	
Commercial General Liability Coverage Amount	Total Rated Capacity of the Generating Facility
\$1,000,000	Greater than 30 kW and less than or equal to 100 kW
\$500,000	Greater than 10 kW and less than or equal to 30 kW

#### Tips for a complete validation.

Submitting a complete and thorough validation package saves everyone time. We've compiled a short list of "must-have" items to keep in mind when sending in your photos and screenshots.

- Utility meter: We must be able to read the number and the placard should be visible.
- Inverters: We must be able to read all of the information on the nameplate and placards.
- Micro inverter screenshots:
   Serial numbers, quantities and settings must be provided.
- Central inverter screen shots: Firmware/software, country code, individual settings and/ or operating modes must be provided.
- AC system disconnect: We must be able to read all information on the nameplate and placards; show the location of the disconnect in proximity to meter and be sure to include all ratings, serial, manufacturer and model numbers.

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