Customer Interconnection Tool (CIT) (Guide for Contractors)

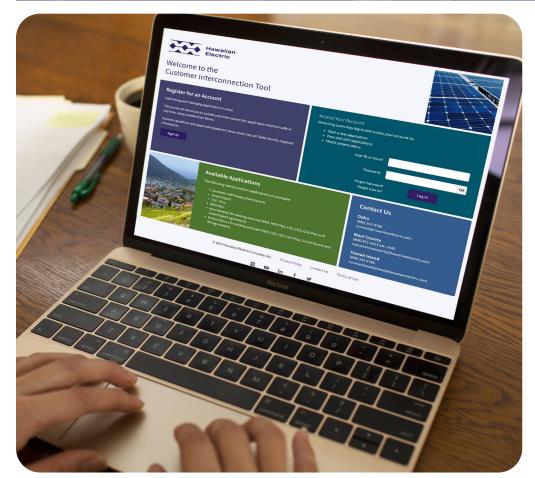










Table of Contents

Overview of the Customer interconnection Tool (CIT)	p. 3
Navigating the CIT Tool	p. 6
Create a New Application	p. 13
Submit a New Application	p. 27
Application Review Process	p. 29
Revisions	p. 36
Project Validation	p. 39
Inspection	p. 49
DocuSign Process	p. 50
Permission to Operate	p. 51
Withdraw an Application	p. 52
Contractor Account Registration	p. 54



Overview of the Customer Interconnection Tool (CIT)

What is the Customer Interconnection Tool (CIT)?

- ◆ A new web-based tool to submit interconnection applications
- ◆ Software solution provide: **GridUnity**
- ◆ Launch date: April 1, 2024

Benefits of CIT

- Automates and streamlines the interconnection application process
- Elimates the need for physical paper
- Improves the customer experience
 - » Better transparency
 - » Guides the user through the application process
 - » Uses customer-friendly terminology
 - » Proactive, timely communication
- Error checking and auto-calculations
- Automatically generates the final agreement and allows for electronic signature through DocuSign



Overview of the Customer Interconnection Tool (CIT)

Sample Communication

Subject: Project ID P-CSS-24-XXXXXX: Application has been submitted

Aloha Customer.

Thank you for submitting an interconnection application for DER Program - Customer Self Supply with Hawaiian Electric.

Submitted by: Contractor
TMK: 1XXXXXXXXXXXXXX
Project Location: ADDRESS
Rate Schedule: 1_R
Project ID Number: P-CSS-24-XXXXXXX

 $This \ Project \ ID \ number \ should \ be \ used \ in \ any \ correspondence \ with \ Hawaiian \ Electric \ regarding \ your \ proposed \ project.$

Please review the attached information and keep for your records. Additional documents submitted with your application can be found online.

Hawaiian Electric's Battery Bonus program, which pays a cash incentive and bill credits to customers who add battery storage to their rooftop solar systems, has reached its maximum capacity of 40 megawatts (MW) on O'ahu, and no new applications will be processed at this time. A successor program to Battery Bonus known as Bring Your Own Device (BYOD) will be available to Hawaiian Electric customers starting March 1, 2024. For more information, please click here.

Here's a look at the next steps:

We will review your application within 15 business days from today. If there are no issues or missing information identified, we will continue our review by looking at your project's technical components and its impact to our electric grid.

To check the status of your application, visit the Customer Interconnection Tool. We appreciate the important step you are taking toward meeting Hawai'i's clean energy goals and look forward to partnering with you on this project.

If you have any questions, or if this application was submitted in error, please contact us at (808) 543-4760 or connect@hawaiianelectric.com.

Mahalo,

Hawaiian Electric



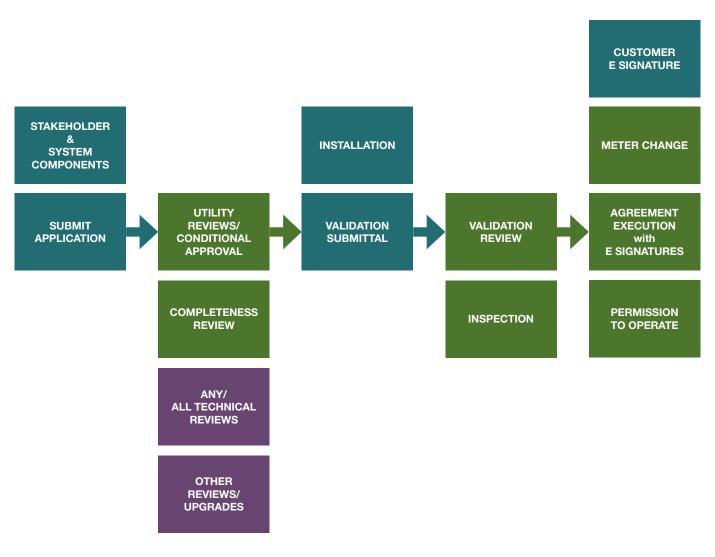
Contact us by mail or email:

Hawaiian Electric

connect@hawaiianelectric.com Distributed Energy Resources P.O. Box 2750, CP12-SE Honolulu, HI 96840



Overview of CIT Workflow



Legend

CONTRACTOR / CUSTOMER

UTILITY PROCESSOR

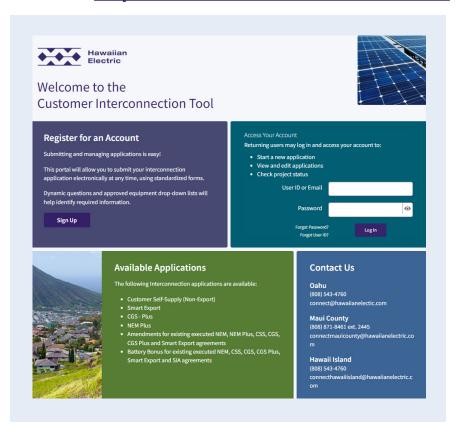
UTILITY ENGINEER

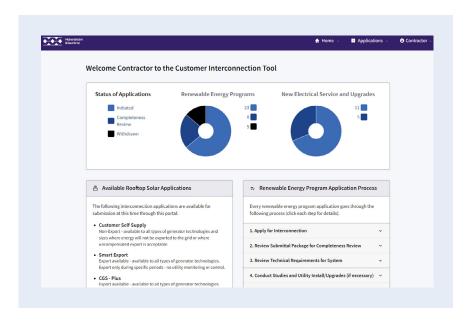


Navigating the CIT Tool

Accessing the Site

URL: <u>https://forms.hawaiianelectric.com</u>







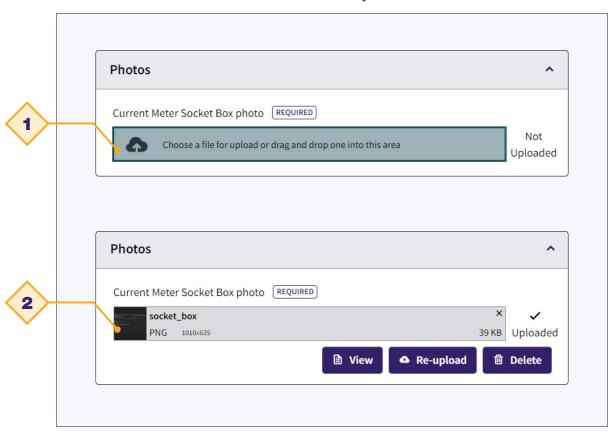
Navigation

APPLY FOR INTERCONNECTION

- Program Selection
- Project Location
 - Project Location
 - Property Accessibility
- > Contact Information
- System Type
- Project System Components
- Additional Information & Drawings
- Application Summary
- ◆ Black text with ✓ checkmark in the left are the completed steps.
- ◆ Bold black text with ▶ solid arrow is the current page/step the user has open.
- ◆ Blue text with circle bullets are the sub sections under the currently open step.
- Black text with open > arrow is a step the user has started but not completed.
- ◆ Gray text with dash in the left are next/future steps that the user cannot reach until completing previous steps.
- Click the ① next to the fields for more details.



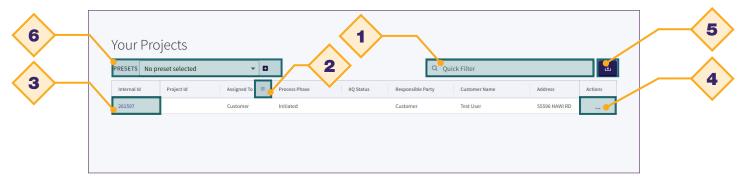
Document Uploads



- 1. Click the "Choose a file for upload" box to locate the file on your hard drive and select it, or drag your file into the file upload box
- 2. Wait for the file to complete uploading



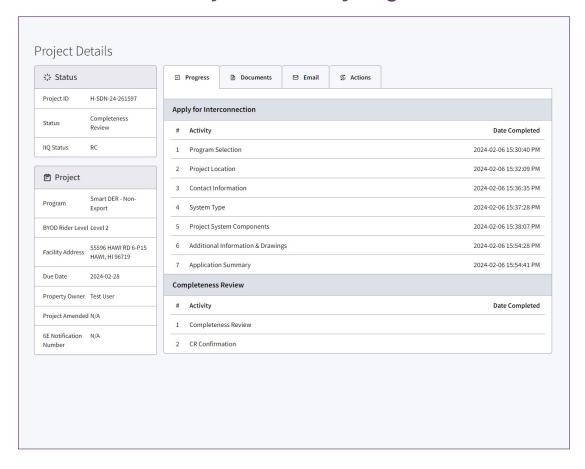
Application List View



- 1. Type in the search bar to find a record
- 2. Hover over a column header and click the table options button to filter by that specific column, add/remove visible columns to the table, and more.
- 3. Click the Internal Id to open the application
- 4. Click on ••• to access additional user actions
 - » Withdraw Application
 - » Revisions
- 5. Use to export the Application List to an Excel spreadsheet
- 6. Use presets to quickly change between different Application List views.



Project Summary Page





Application Status

ACTION	PROCESS PHASE	IIQ STATUS	RESPONSIBLE PARTY
Application in progress	Initiated		
Application submitted, pending Completeness Review	Completeness Review	RC	Utility
Corrections needed after Completeness Review	Completeness Review	CAR	Customer
Completeness Review passed, pending ITR	Initial Technical Review	ITR	Utility
Supplemental Review needed	Supplemental Review	SR	Utility
Customer actions required during Technical Reviews	Initial Technical Review or Supplemental Review	CAR	Customer
Conditional Approval, Pending Installation	Conditional Approval	PI	Customer
Pending Project Verification and Inspection	Project Verification	PV	Utility / Customer
Pending Execution	Pending Execution	PE	Utility / Customer
Executed, Permission to Operate	Executed	EX	



Re Submittal VS Revision

Re Submittal

- Utility initiated requests for corrections / missing items discovered during the project completeness review.
- Resubmittals may happen only during the CAR to RC Completeness Review phase.
- Queue Position will be affected.

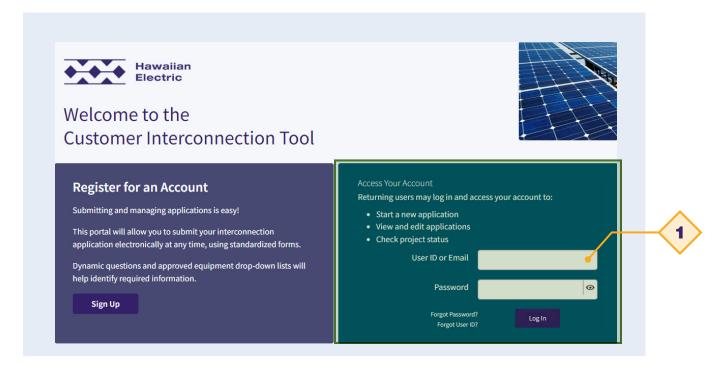
Revision

- Revisions are considered customer / contractor initiated changes.
 - » Revisions are accepted between Notice of Conditional Approval and Validation submittal.
 - » Revisions may be accepted as a result of an incomplete validation
- Queue Position may be affected.



Create a New Application

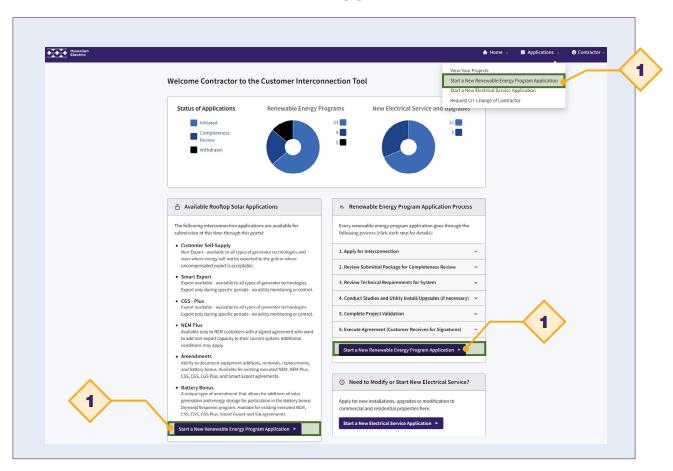
CIT Login



1. Log in your account using your user ID and Password.



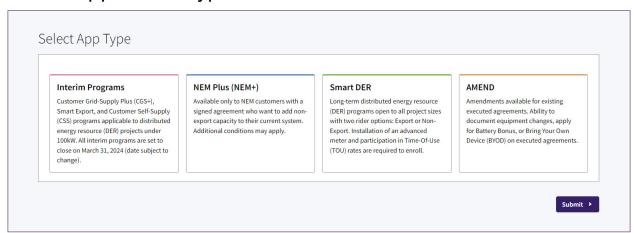
Start a New Application



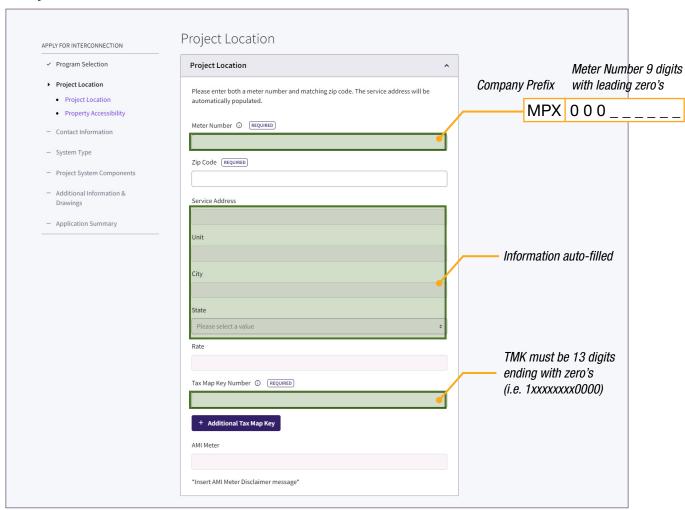
1. Click 'Start a New Renewable Energy Program Application' to start a new application.



Select Application Type

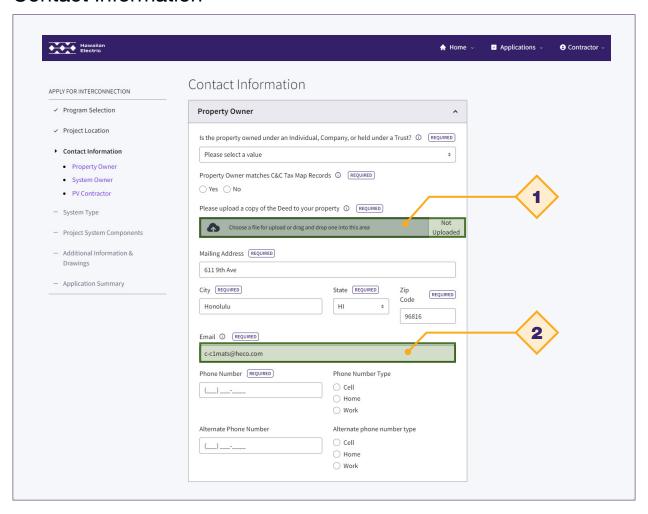


Project Location





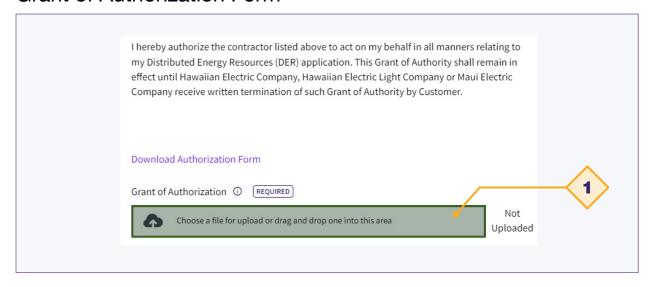
Contact Information



- 1. Upload a copy of the Deed to your property.
- 2. This email address will be used for the DocuSign process and should be the address for the signing property owner.



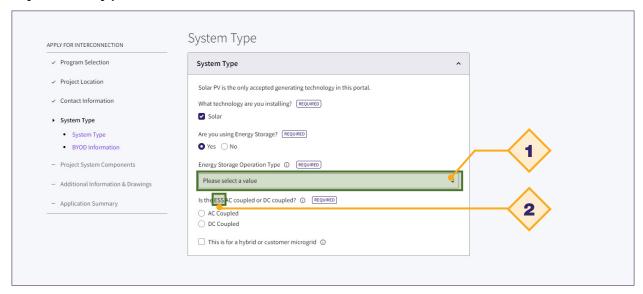
Grant of Authorization Form



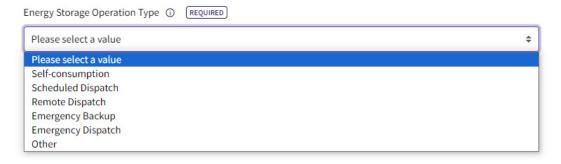
1. Upload customer's signed authorization form.



System Type



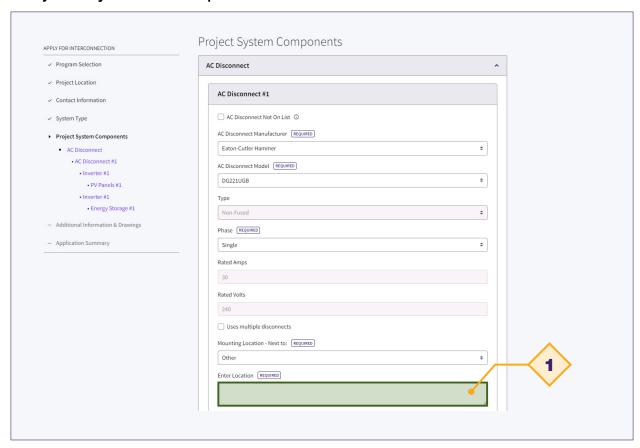
1. Energy Storage Operation Type:



2. ESS = Energy Storage System



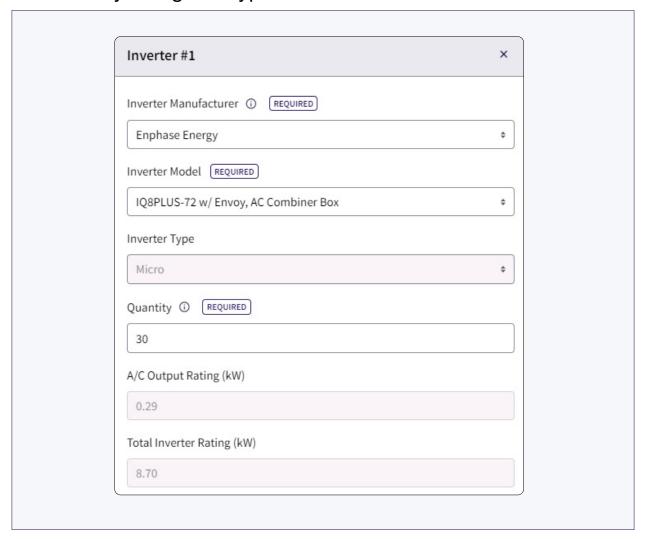
Project System Components



1. If the Mounting Location is not immediately adjacent to the utility meter, please specify.



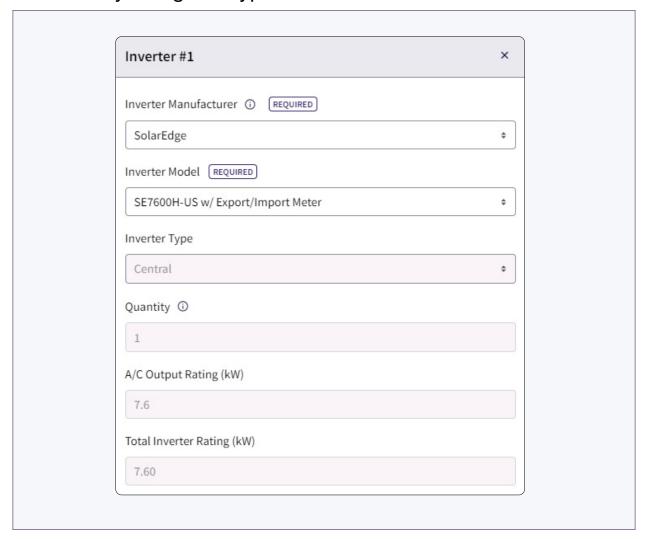
Inverters by string and type



◆ Micro Inverter



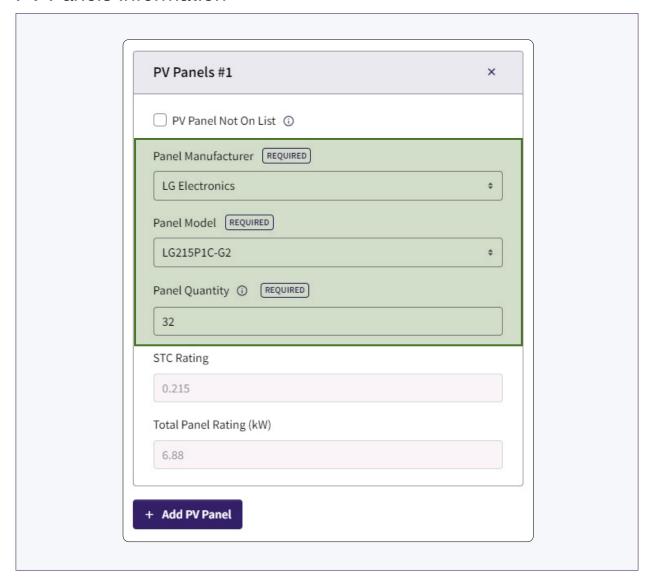
Inverters by string and type



String Inverter



PV Panels Information

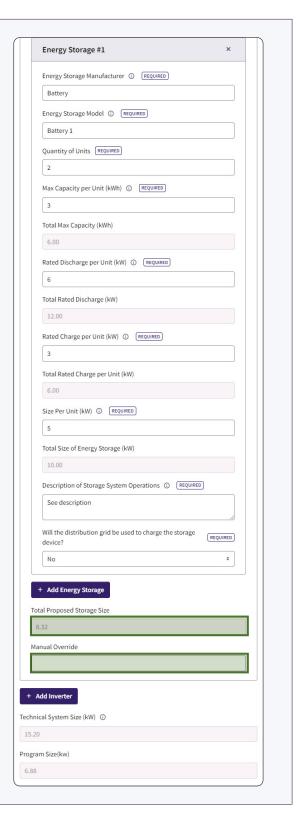


- PV Panels are connected to the corresponding inverter string
- Multiple strings of PV panels may be added to the same inverter string
- Total panel quantity and panel size are listed for the inverter string



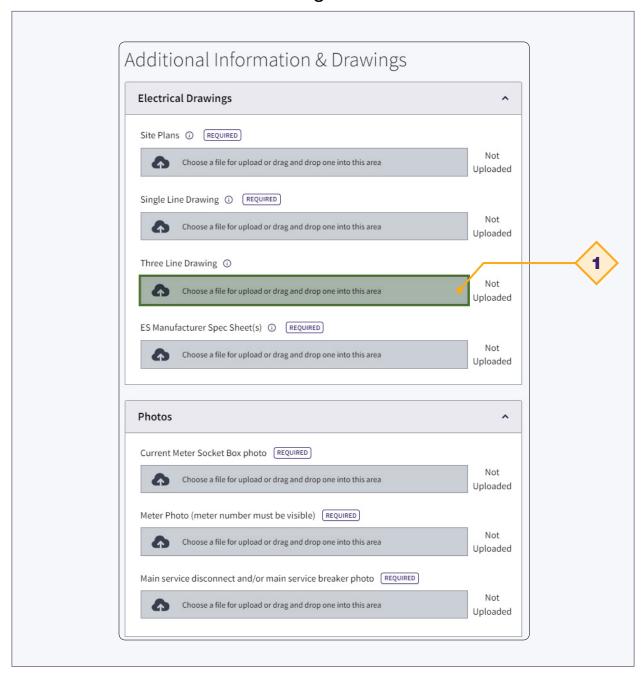
Energy Storage

- Information entered manually
- Energy storage is connected to the corresponding inverter string
- Auto-calculated Total Proposed Storage Size
- Total Proposed system Size can be manually overwritten depending on the system configuration





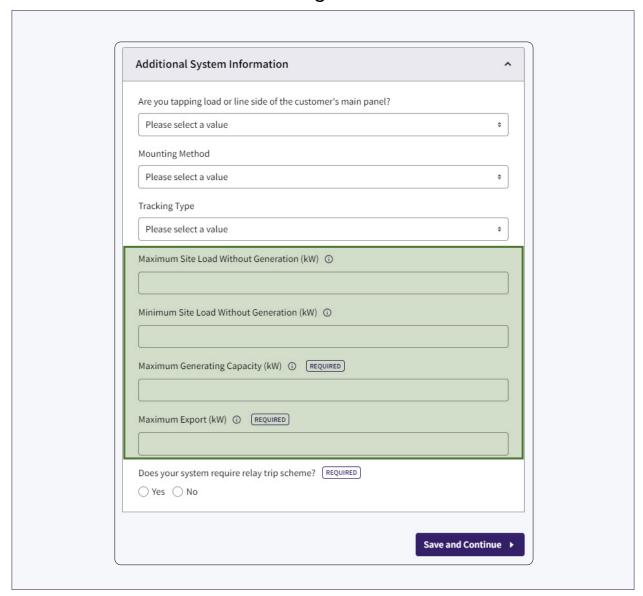
Additional Information & Drawings



1. Required if the system is \geq 30kW.



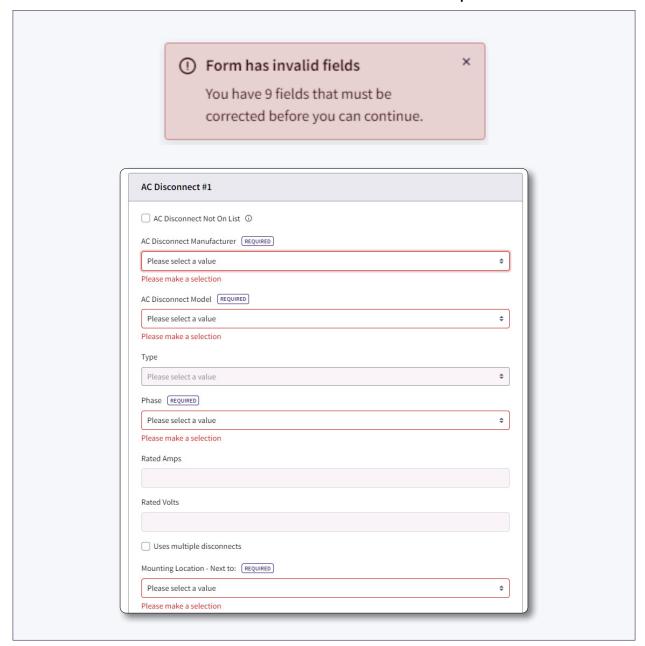
Additional Information & Drawings



- Maximum and Minimum Site Loads without generation required for systems ≥ 30kW
- Maximum Generating Capacity should be equal to Total Proposed System Size
- ◆ Program Size = system size without ESS



Fields marked in **RED** mean corrections are required.

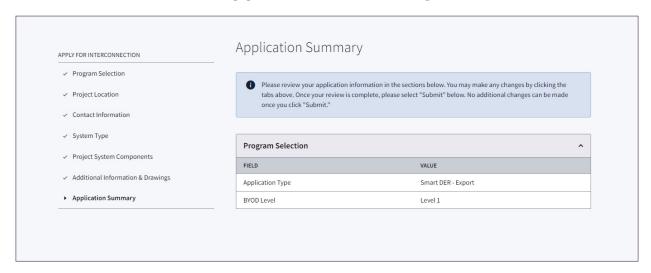


Example: In this case, the AC Disconnect information needs to be filled in.



Submit a New Application

Application Summary



- Review the entire application before submitting
- Navigate through the past progress steps to make changes
- ◆ To save changes, click 'Save and Continue' at each progress step
- ◆ To update the Application Summary, 'Save and Continue' at the step right before the Application Summary



Confirmation Page and Email

Subject: Project ID P-CSS-24-XXXXXX: Application has been submitted

Aloha Customer

Thank you for submitting an interconnection application for DER Program - Customer Self Supply with Hawaiian Electric.

Submitted by: Contractor
TMK: 1XXXXXXXXXXXX
Project Location: ADDRESS
Rate Schedule: 1_R
Project ID Number: P-CSS-24-XXXXXX

This Project ID number should be used in any correspondence with Hawaiian Electric regarding your proposed project.

Please review the attached information and keep for your records. Additional documents submitted with your application can be found online.

Hawaiian Electric's Battery Bonus program, which pays a cash incentive and bill credits to customers who add battery storage to their rooftop solar systems, has reached its maximum capacity of 40 megawatts (MW) on O'ahu, and no new applications will be processed at this time. A successor program to Battery Bonus known as Bring Your Own Device (BYOD) will be available to Hawaiian Electric customers starting March 1, 2024. For more information, please click here.

Here's a look at the next steps:

We will review your application within 15 business days from today. If there are no issues or missing information identified, we will continue our review by looking at your project's technical components and its impact to our electric erid.

To check the status of your application, visit the Customer Interconnection Tool. We appreciate the important step you are taking toward meeting Hawai'i's clean energy goals and look forward to partnering with you on this project.

If you have any questions, or if this application was submitted in error, please contact us at (808) 543-4760 or connect@hawaiianelectric.com.

Mahalo,

Hawaiian Electric



Contact us by mail or email:

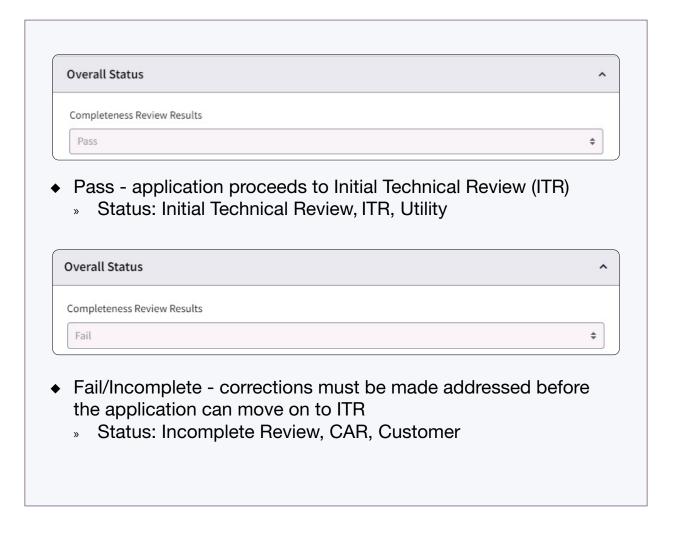
Hawaiian Electric

connect@hawaiianelectric.com Distributed Energy Resources P.O. Box 2750, CP12-SE Honolulu, HI 96840



Application Review Process

Completeness Review Results



Completeness Review Incomplete Email

TMK: 1XXXXXXXXXXXX

Project Location: ADDRESS

Project ID Number: P-SDN-23-233238

Aloha Customer,

 $Our \ Distributed \ Energy \ Resources \ team \ has \ completed \ review \ of \ your \ Interconnection \ Application \ for \ Smart \ DER - \ Non-Export \ on \ 2023-12-05 \ 10:14:40.$

Next Steps:

The results of our review identified some issues in your application, which require your attention. Please review the flagged items and any associated comments attached. Access your application online to make the necessary updates.

Any corrections must be made online through the Customer Interconnection Tool. Once you re-submit your application, we will review within 15 business days of receipt. If additional updates or information is not needed, then we will move forward with an Initial Technical Review of your project's equipment and its impact on our electric grid.

Thank you for your patience during this process. If you have any further questions, please contact us at (808) 543-4760 or connect@hawaiianelectric.com.

Mahalo,

Hawaiian Electric



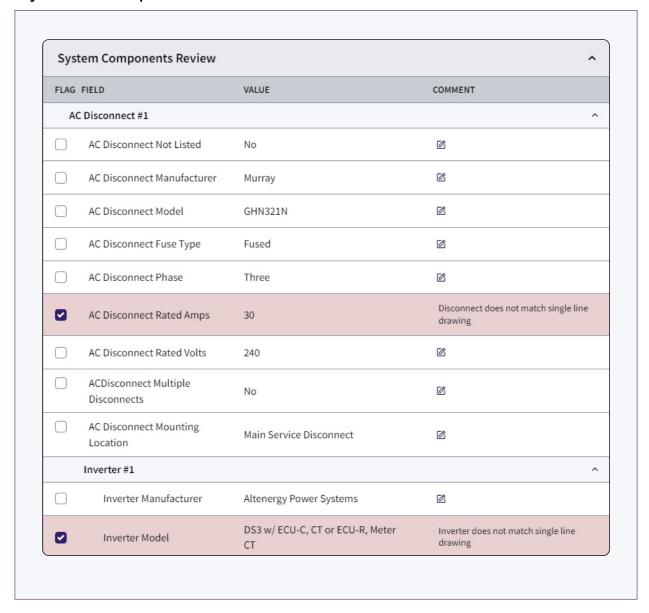
Contact us by mail or email:

Hawaiian Electric

connect@hawaiianelectric.com Distributed Energy Resources P.O. Box 2750, CP12-SE Honolulu, HI 96840

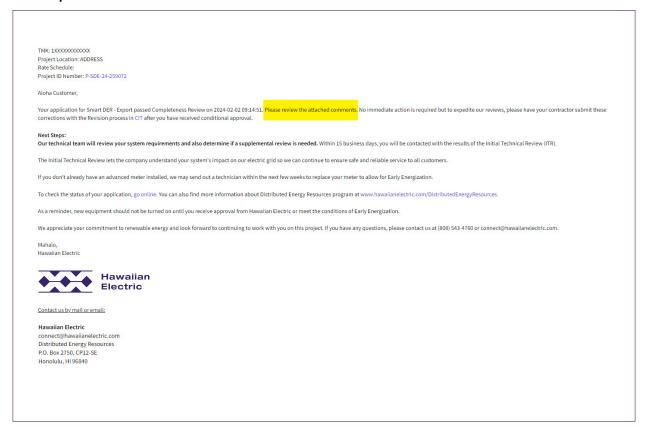


System Components Review

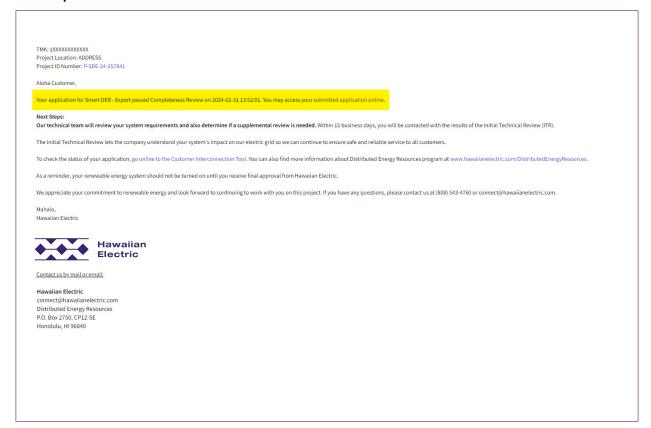




Completeness Review Passed with Minor Corrections Email



Completeness Review Passed Email



Technical Review

- An email will be sent with the result of the initial Technical Review (ITR) and will state if a Supplemental Review (SR) is necessary.
- If a Supplemental Review is necessary, the result of that review will be emailed.
- ◆ The application will be conditionally approved when all technical reviews are passed. At this time, you have permission to install.

Initial Technical Review Failed Email

48.4 kW Photovoltaic System ("PV System") Project ID Number: P-SDE-24-257841 Hawaiian Electric has completed the initial technical review of your application and has determined that your application requires a supplemental review (SR). Your application did not pass the technical screen(s) noted in bold and red • Screen 1: Does the proposed Generating Facility meet the Technical Specifications stated in Rule 22 (Customer Self-Supply), Appendix II?
• Screen 2: If the proposed Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, does it cause unacceptable imbalance between the two phases of the 240 volt service? Screen 3: Is the Point of Interconnection to a Network System? directional? Screen 5: Is the aggregate Generating Facility capacity on the Line Section less than or equal to 15% of Line Section peak?
 Screen 6: Is the voltage flicker and/or voltage drops associated with the Generating Facility within IEEE 519, IEEE 1453, or General Order 7 limits? • Screen 7: Do the maximum aggregated gross ratings for all the Generating Facilities connected to a secondary distribution transformer exceed the transformer, secondary conductor, fuse, or other equipment rating, absent Screen 8: Short Circuit Current Contribution Ratio within acceptable limits? Screen 9: Is the Short Circuit interrupting capability exceeded?
 Screen 10: Is the Line Configuration Screen acceptable for Simplified Interconnection? Screen 11: Is the gross rating of the Generating Facility 100 kVA or less? The full listing of technical screens have been provided as a reference so you may understand the steps taken to successfully complete initial technical review. Additional information on these screens may be found in Appendix III of Rule 14HI. SR may take up to 20 business days to complete. We will inform you of the SR results by email. As a reminder, your distributed energy system should not be turned on until you receive final approval from Hawaiian Electric. If you have any questions, please do not hesitate to us at (808) 543-4760 or connect@hawaiianelectric.com. Hawaiian Electric Contact us by mail or email: Hawaiian Electric Distributed Energy Resources P.O. Box 2750, CP12-SE Honolulu, HI 96840



Conditional Approval Email

5.2 kW Photovoltaic System ("PV System") TMK: 3XXXXXXXXXXXXXXX
Project Location: ADDRESS

Project ID Number: H-SDN-24-257900

Aloha Customer,

We are pleased to inform you that your Smart DER - Non-Export application for your rooftop solar system has been conditionally approved subject to the conditions below.

From the date of this notice, the generating system must be installed, the post-installation documentation received and validated, and your agreement executed by Hawaiian Electric within 18 months or by 2025-07-31.

If there are any revisions to your original application or originally designed system, changes must be made to your application online or revised documents must be submitted by mail. Revisions may include a change in system size, contractor and/or owner/operator, system equipment such as inverter(s) or modules, etc. All revisions will be subject to necessary technical review prior to final interconnection approval.

- REQUIRED POST-INSTALLATION DOCUMENTATION:

 Submittal of completed Distributed Energy Resources (DER) Interconnection Project Validation Packet online
 - · Please refer to the Distributed Generation (DG) Interconnection Project Validation Packet.

As a condition of interconnection of the Generating Facility, Customer-Generator agrees that all inverters shall comply with Hawaiian Electric applicable specifications. Additional information can be found on our Advanced Inverter Information website. If you have any questions regarding inverter settings, please contact DER at (808) 543-4760.

A current listing of approved inverters for your specific DER program can be found on our Qualified Advanced Inverters website. The inverters will need to be reset to comply with utility standards. Please contact the manufacturer for

If you are no longer interested in proceeding with your interconnection request, please withdraw online or email a completed Withdrawal Form to us as soon as possible to cancel your application. Forms can be found on our website and emailed to us at connect@hawaiianelectric.com.

If you have been notified previously to make corrections to your application, please submit those corrections with the Revision process in CIT.

We appreciate your patience and understanding during the review and approval process. The process does take time since Hawai'i is far ahead of the rest of the country in its level of solar photovoltaic (PV) integration and our isolated island grid presents unique technical considerations that very few utilities in the world, if any, have had to address

Additional information can be found on our website: Distributed Energy Resources

Mahalo,

Hawaiian Electric



Revisions

Revision Types

Change of Contractor Revision

- If your customer is changing contractors, submit a new application in CIT
- ◆ At Completeness Review, the utility will work with the customer to confirm their choice of contractor and withdraw the other application

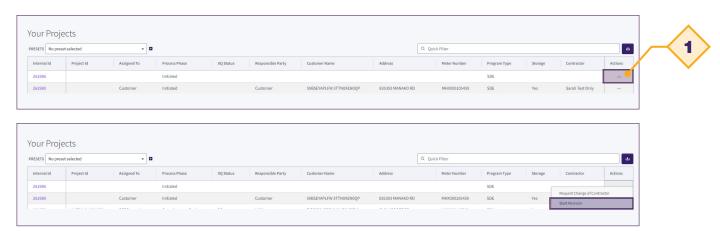
Change to System Component(s) Revision

Prior to submitting the Validation



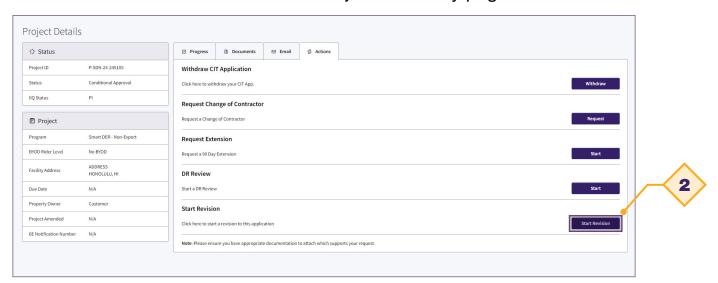
How to start a Revision

1. Navigate to Application List and click the User Actions to submit a revision



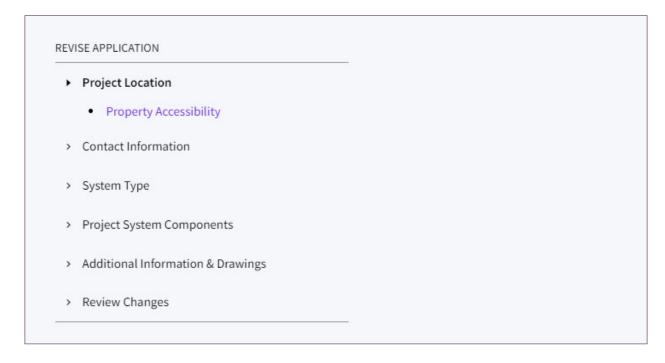
OR

2. Select 'Start a new revision' from Project Summary page



How to submit a Revisions

Navigate through the progress steps to change desired fields



- Click 'Save and Continue' on the bottom of each revised step and on the 'Additional Information & Drawings' page
- ◆ Changes will be shown in red on the 'Review Changes' page

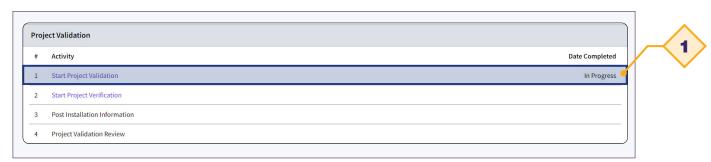




Project Validation

Submitting the Validation

1. Click on the hyperlink for 'Start Project Validation' on the Project Summary Page to start the Validation submittal



 You may enter parts of the Validation, click 'Save and Continue', and come back to submit the entire packet at a later time

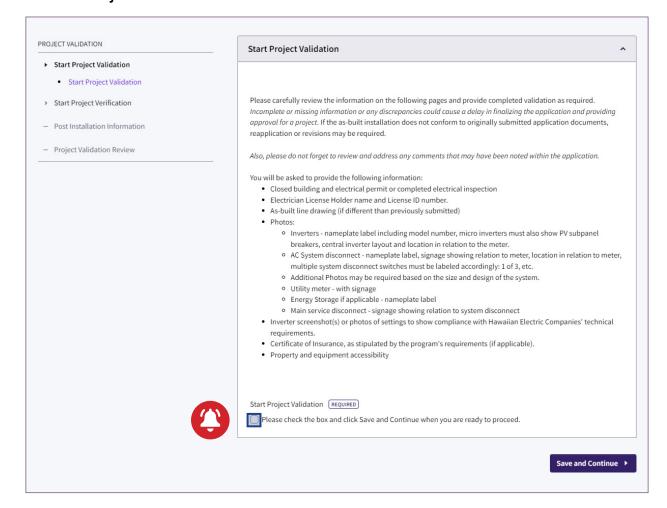
Validation Requirements

If installed project varies **at all** from online application information, a revision will be required prior to submitting for validation. Once revision is approved, validation may proceed.

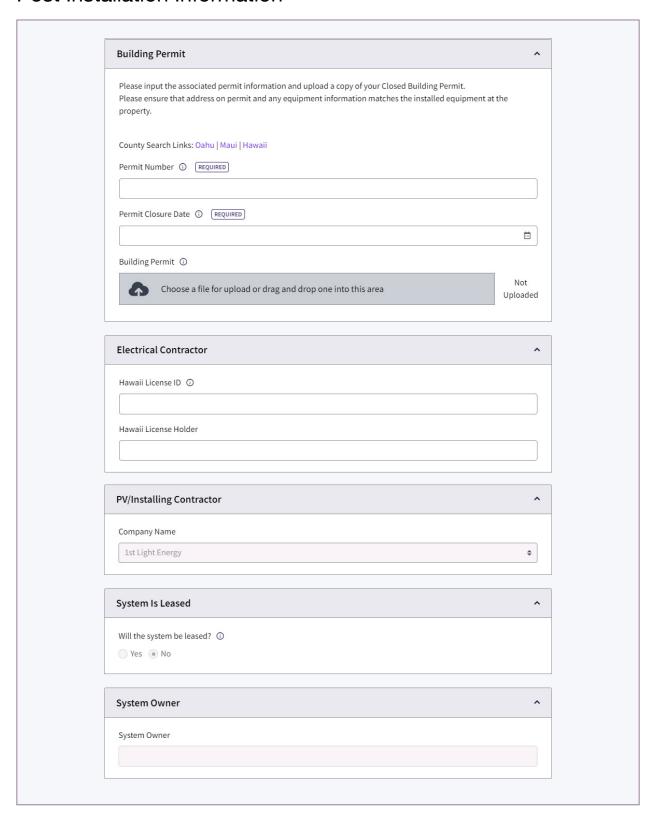
If **no changes** have been made to the last submittal and project installed matches application data exactly the requirements on the next page apply.



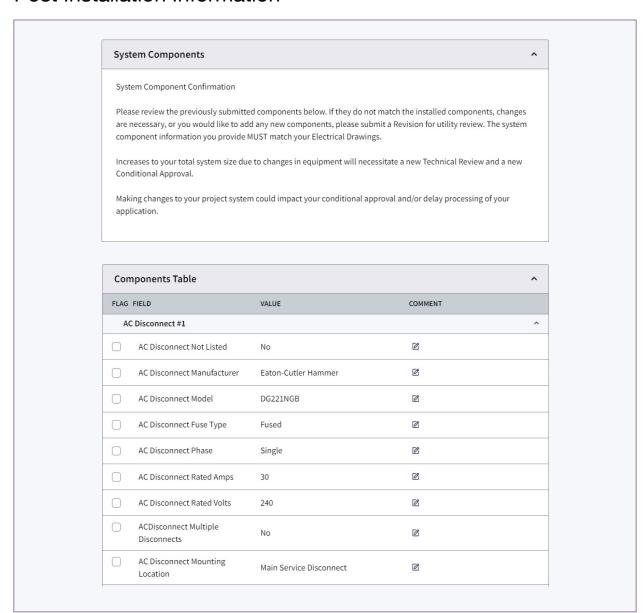
Start Project Validation



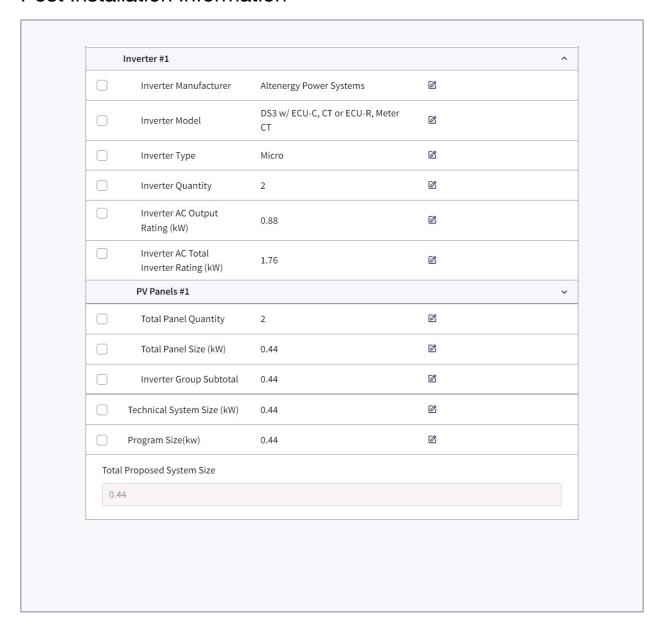




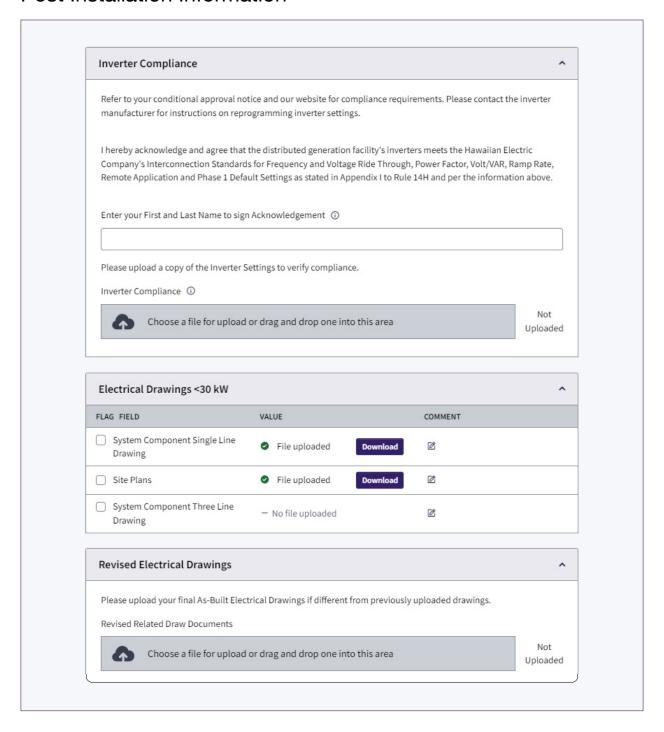




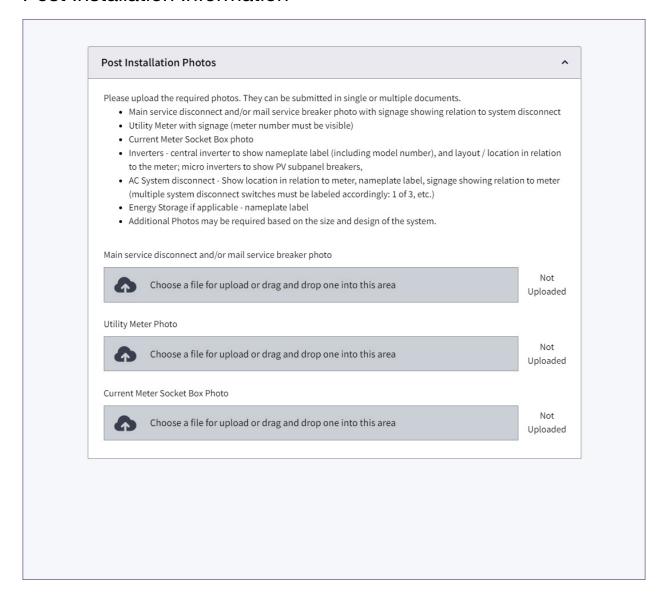




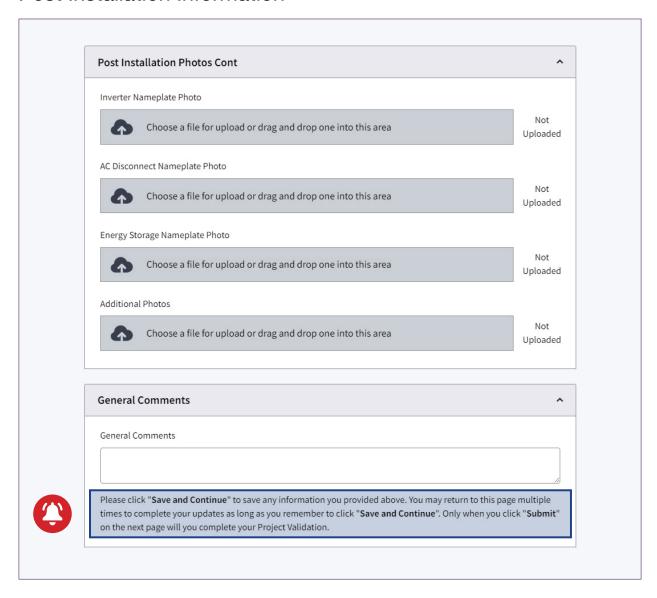






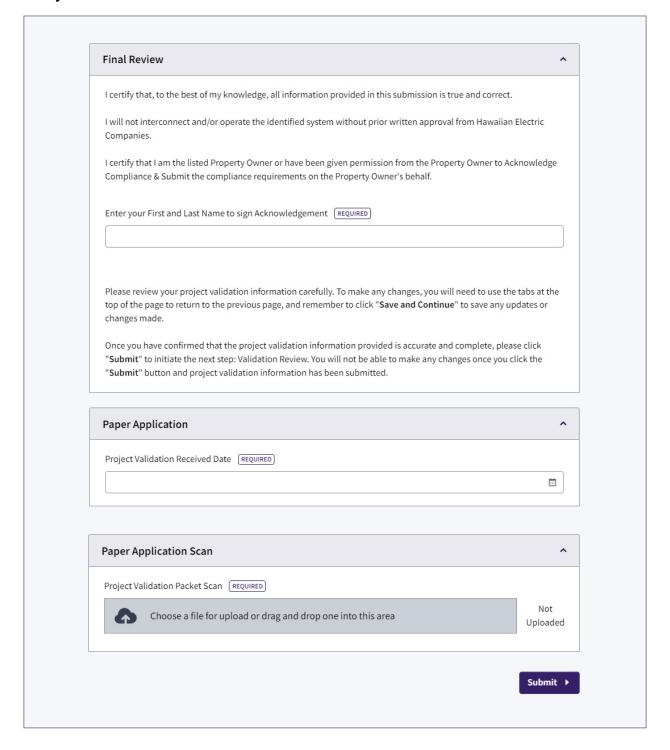








Project Validation Review





Validation Requirements

- Same requirements as the current CSS Validation Procedure
- ◆ You have the option to upload photos individually or as a set
- Ensure what you submit in the Validation Packet matches the application. If changes were made, submit a Revision before the Validation

Validation Received Email

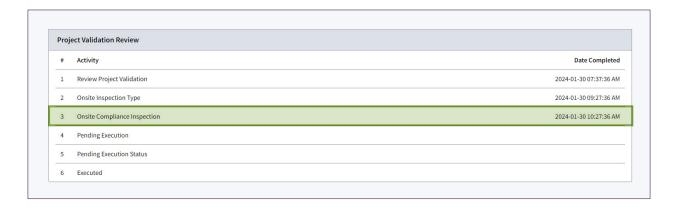
8.95 kW Photovoltaic System ("PV System") TMK: 2XXXXXXXXXXXXX Project Location: ADDRESS Rate Schedule: 3_R Project ID Number: M-SDE-24-256821 Aloha Customer. Thank you for submitting the project validation packet for your Smart DER - Export Interconnection Application. We will review these documents and let you know if there is any missing information or other issues with your validation packet.During the validation process, we may contact you to schedule a witness verification test or an onsite inspection for verifying that your system meets the requirements noted in your application. Qahu Customers: If you've submitted an attestation form in lieu of a full validation packet through the Expedited Validation Option, please remember that your system may be subject to audit after the agreement To check the status of your application, go online to the Customer Interconnection Tool. You can also find more information about Distributed Energy Resources programs at As a reminder, your renewable energy system should not be turned on until you receive final approval from Hawaiian Electric If you have any questions, please contact us at (808) 543-4760 or connect@hawaiianelectric.com. Hawaiian Electric Hawaiian **Electric** Contact us by mail or email: **Hawaiian Electric** connect@hawaiianelectric.com Distributed Energy Resources P.O. Box 2750, CP12-SE



Inspection

Inspection

- Company-specific requirements
- We will perform our inspection when the validation review is completed
- Track when the inspection is completed on the project summary page:

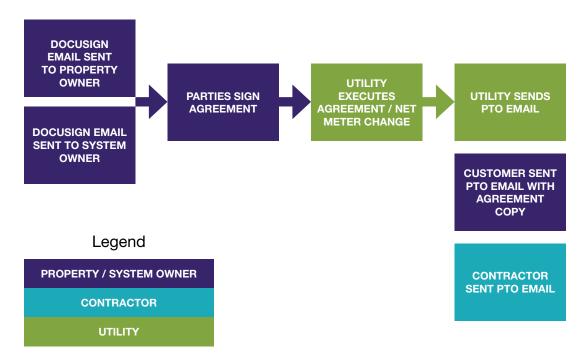




DocuSign Process Overview

DocuSign Process

◆ After the project passes inspection, an email from DocuSign will be sent to the Property Owner and System Owner (if applicable)

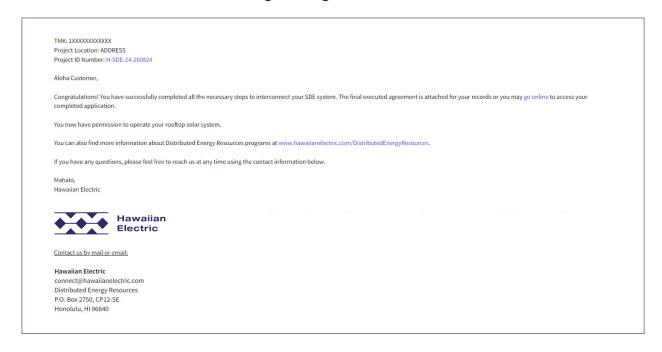




Permission to Operate

Permission to Operate

- ◆ After meter is changed out & the Agreement is fully executed, the PTO Email will be sent from CIT.
- ◆ Emails to signing parties (property owner & system owner) will also receive attachment with signed agreement.



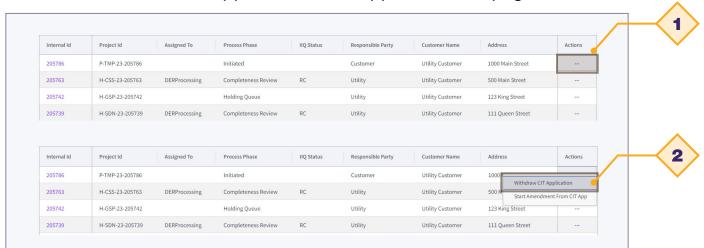


Withdraw an Application

Withdraw an Application

 Navigate to Application List and click the User Actions to withdraw a CIT application

2. Select 'Withdraw CIT Application' from Application List page



OR

3. Through the Project Summary page





Withdraw Application

Internal Confirm Are you sure you want to continue? By pressing Continue on this page, you will set this application to a process phase of "Withdrawal". The withdrawal request will subsequently need to be approved, or rejected for the application to regain its previous process phase. If you do not wish to continue, simply close this window. Below are the details for the application you have selected. Assigned to: Customer Due Date: Project ID: P-SDN-23-Progress Phase: Completeness IIQ Status: Action For: 233238 CAR Customer Review Service Address: 820 WARD AVE, HONOLULU, HI 96814 Property Owner: test test Upload Withdrawal Form (REQUIRED) Not Choose a file for upload or drag and drop one into this area Uploaded Enter Reason for Withdrawal REQUIRED \$ Please select a value Is this withdrawal approved? REQUIRED ○ Yes ○ No Enter reason for rejection REQUIRED Move to App Detail **Close Window**



Contractor Account Registration

Setting up your account

Your company account must be verified and activated prior to using the tool.

Contractor Verification Process

- ◆ Company name must match the licensed business name found in the DCCA's (Department of Commerce and Consumer Affairs) records
- ◆ Company-specific email (contractor@solarcompany.com)
- Designated Company point of Contact (one per company)
- ◆ Provide a list of current employees who will need access to CIT
 - » We will call the Point of Contact to verify the company's representatives
- Regular registration online set up Point of Contact account, which serves as the main account for your company



Questions or Comments?

DER Hotline: (808) 543-4760 Email: <u>connect@hawaiianelectric.com</u>

