

Setup Guide

Residential Installation with
Huawei and Locus Energy



HUAWEI



This document is intended for residential installers of the Huawei FusionHome Smart PV Solution in the US and will guide users through the process of registering new systems within the LocusNOC platform. For general questions about the various functions of the LocusNOC platform, installers are encouraged to visit Locus Energy's help portal by clicking through from the HELP tab in the LocusNOC platform.

PLEASE NOTE: If this is your first time installing a system with Locus Energy, you must first contact them to have a new account setup to begin registering new systems. You may do this by sending this request to sales@locusenergy.com.

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Adding a New Customer's Site to LocusNOC

Within LocusNOC, the Configuration page allows installers to register new sites and update any information for existing sites. Once one or more sites have been registered, they will be accessible via the Search-Browse Pane on the left side of the Configuration page. This document will step you through registering NEW sites and components utilizing residential Huawei inverters. We recommend that you visit the LocusNOC help portal for additional information about the platform.

To register a new customer's site, there are three core registration steps involved:

1. Registering the site
2. Registering the components
3. Configuring some simple customer information and sending an email invite to the homeowner mobile app, MyLocusEnergy.

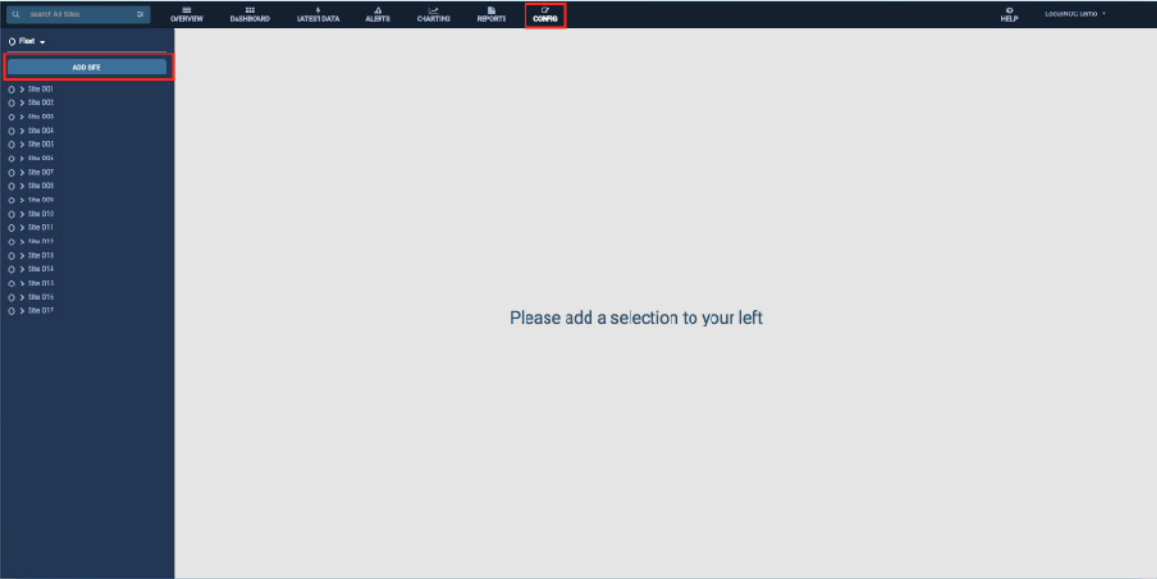
All of the configuration steps will take place from the Config page of the LocusNOC web application.

Locus does also offer a CSV batch upload process, facilitated through our Support team. This process requires a minimum of 25 uploaded systems to be utilized. If this is something you would like to take advantage of, you will need to contact support@locusenergy.com to learn more.

1A - Adding a Site (REQUIRED)

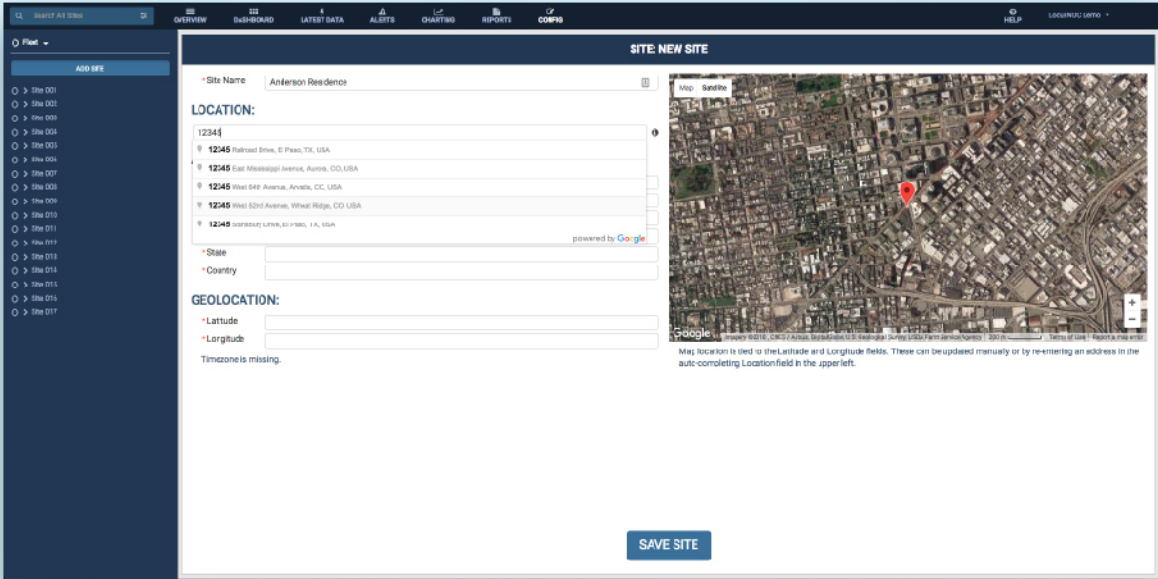
Adding a site is simple and requires only a few fields. There are some additional configuration options that will provide more functionality for organizing systems and monitoring performance within the platform, which will be covered in the next section.

- 1. To add a site in LocusNOC, click on the Config route in the header
- 2. In the Search-Browse Pane on the left, click the “Add Site” button

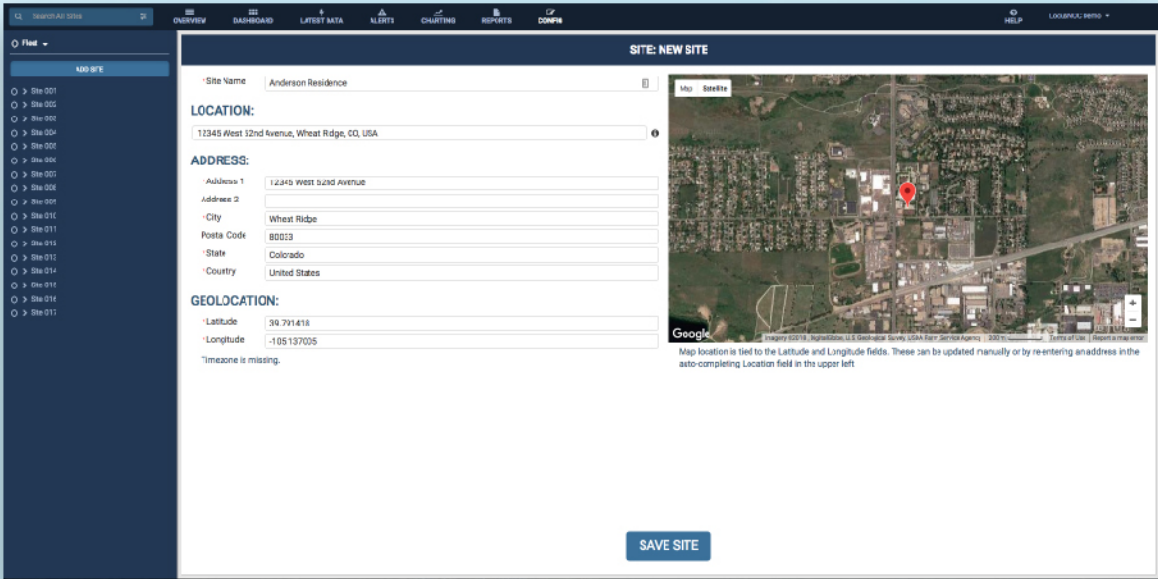


3. Input Basic Info for the site.

- o Site Name: This will be the name of the site that you will see across the LocusNOC platform and that the homeowner will see in the MyLocusEnergy app. We recommend that you name the site as [Homeowner Last Name] Residence, i.e. “Anderson Residence”
- o Location: Enter the address in the Location bar and google search will help locate it for you. You can also adjust the address fields manually below.



4. Click Save Site at the bottom of the page



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1B - Additional Site Configuration

Everything in this section is optional and does not need to be completed at the time of initial registration. We do recommend taking advantage of these available features for more efficient monitoring of your fleet of installed sites.

Basic Info

Once you have initially saved a site, the name and address will appear in the Basic Info tab. You can edit the name and location settings at any time through this tab.

Anderson Residence

SITE: BASIC INFO

Site Name: Anderson Residence

LOCATION:

Enter a location

ADDRESS:

Address 1: 12345 West 52nd Avenue

Address 2:

City: Wheat Ridge

Postal Code: 80033

State: Colorado

Country: US

GEOLOCATION:

Latitude: 39.791418

Longitude: -105.137305

Timezone: America/Denver

SAVE BASIC INFO

Tags

Tags are unique fields that you can add to a site. Tags are searchable and are useful for the creation of groups based on text fields. This will allow you to organize sites into specific groups for more efficient fleet management. These tags can be updated at any time so they do not need to be added during initial registration. More information about creating groups can be found in the Overview training video.

Anderson Residence

SITE: TAGS

Tag 1: Group ABC

Tag 2:

Tag 3:

Tag 4:

Tag 5:

SAVE TAGS

Install Info

Install information is here for your own records. Installer, Install Crew, Install Date, and PTO date are metadata fields that have no bearing on site analysis.

Startup date does effect when Energy Expectations and VI are available for the site and can also be used in advanced search and grouping functionality.

Anderson Residence

SITE: INSTALL INFO

Installer:

Install Crew:

Install Date (YYYY-MM-DD):

PTO Date (YYYY-MM-DD):

Startup Date (YYYY-MM-DD):

SAVE INSTALL INFO

Energy Expectations

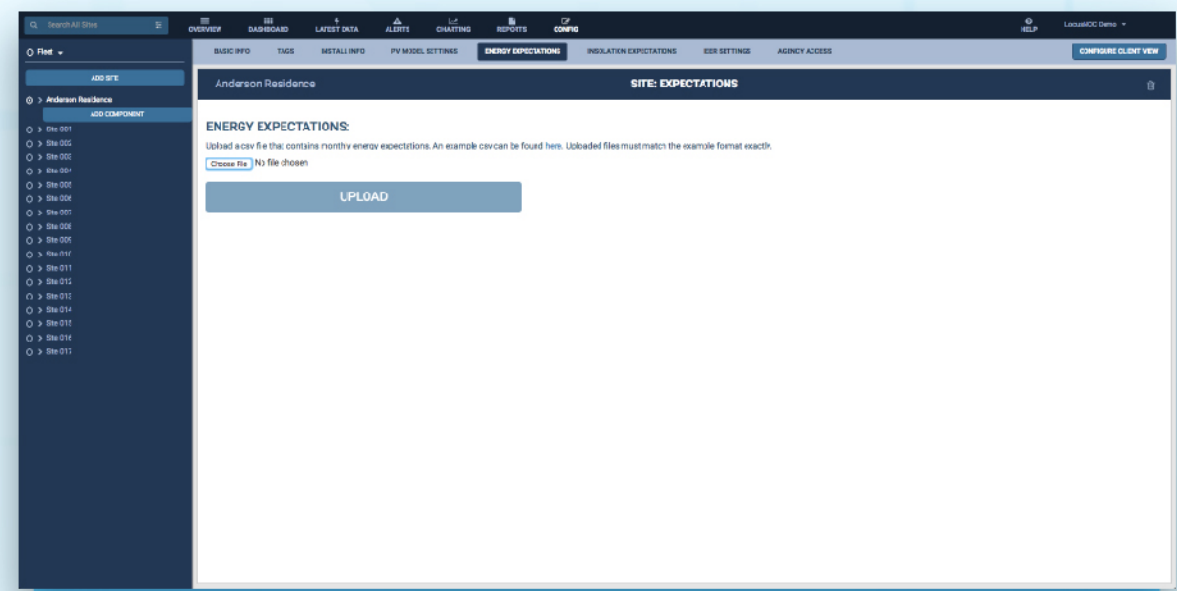
Energy Expectations can be uploaded to better track expected vs measured performance for your sites. This requires you to upload monthly energy expectations for the site - The LocusNOC does not provide these values for you. The Energy Expectations tool allows you to upload up to 30 years of site-level monthly energy expectations data.

The form supplies a template to use to input this data. Upon upload, you will receive a success response or a description of errors in the file.

After uploading energy expectations data, you may view, export, update and delete the existing expectations within the Energy Expectations tab. To update expectations, export the data, make edits, and then re-upload. Uploading a new csv will overwrite existing data.

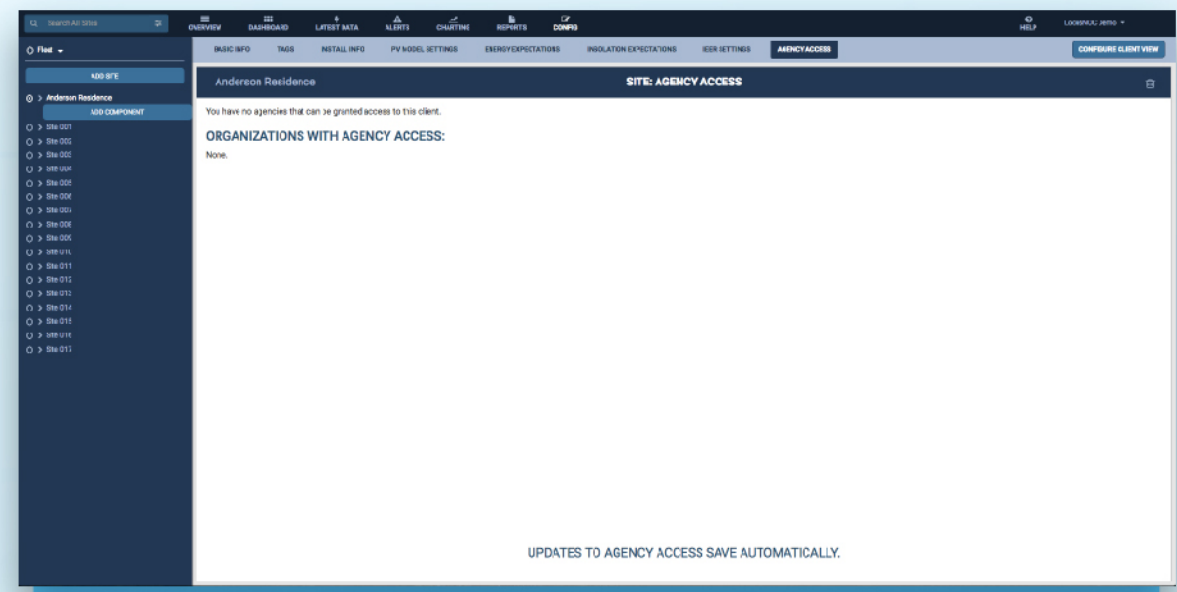
Note: Energy Expectations are prorated from the user-input startup date. If there is any expectation data provided for the months prior to the startup date it will be ignored. The month of the provided startup date is prorated based on the number of days remaining in the month after startup. If a startup date is not provided then all energy expectations are included by default.

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Agency Access

Agency Access allows you share read-only access for any given site to another company in LocusNOC. This is useful if you have another company that is responsible for some part of the overall site management, such as O&M. If this is a feature you would like to take advantage of, you may contact sales@locusenergy.com to link other company accounts and see them from within the Agency Access form.

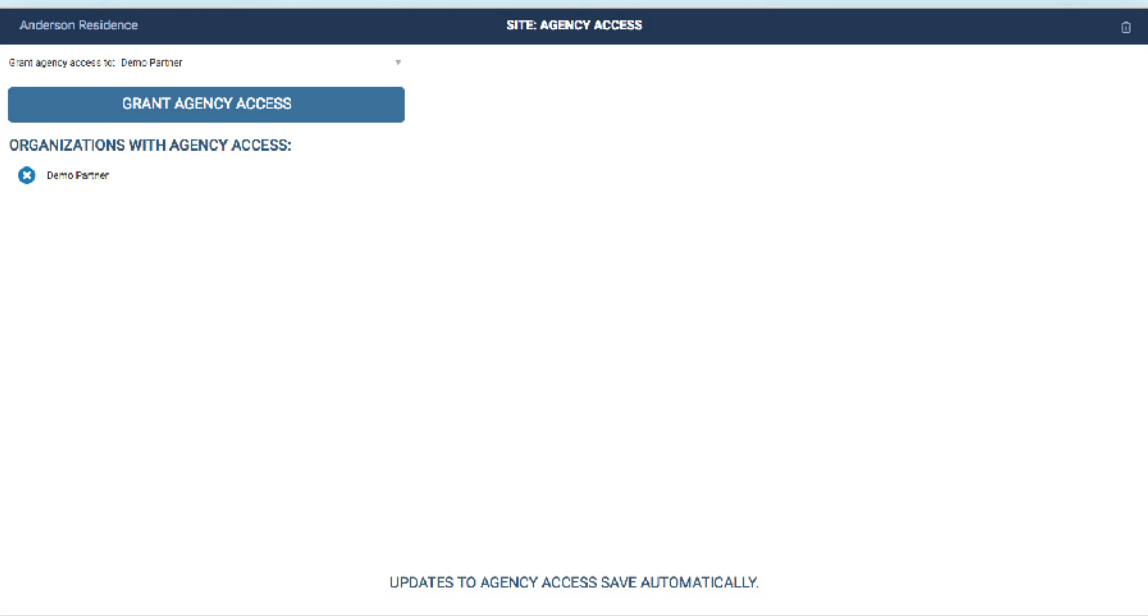


At the time your partner account was created, we likely added 'Huawei' to the list of available Partners to grant Agency Access to. During any troubleshooting that occurs in conjunction with the Huawei team, this will allow you to provide temporary access for a single site to the Huawei team so that they can see the same data in the LocusNOC platform.

To add agency to another company:

- 1. Select a partner from the dropdown list.
- 2. Click “Grant Agency Access”

You can remove Agency Access by clicking the “X” to the left of the partner name. A single site can be agencied to multiple partners.



If you do not see the desired partner in the dropdown, email sales@locusenergy.com and they can help link your account with the desired partner.

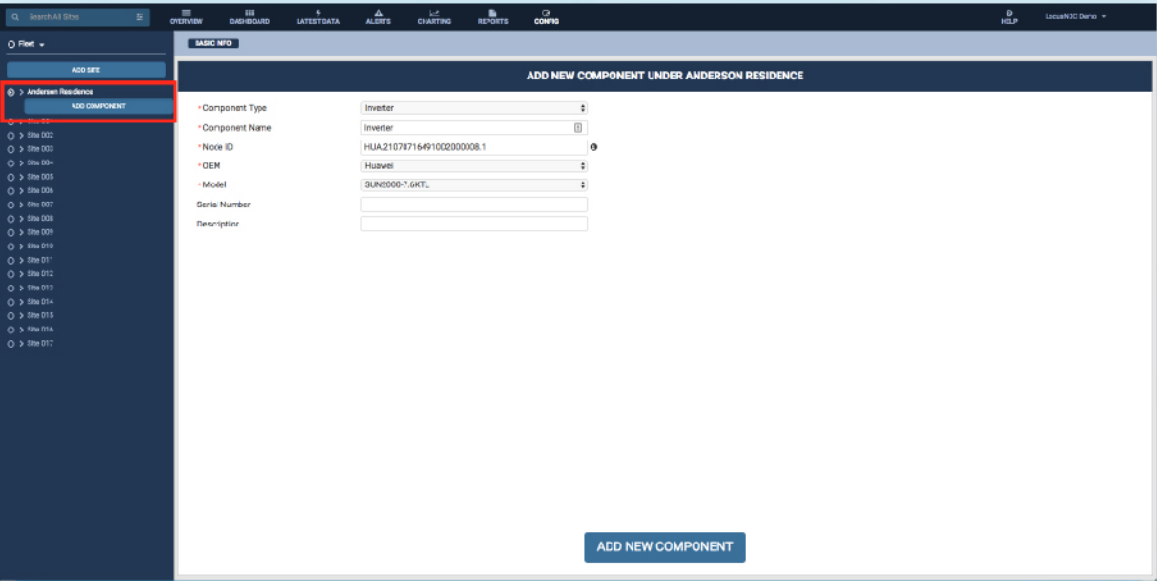
Please ignore the remaining sections of PV Model Settings, Insolation Expectations, and IEER Settings - these only apply to sites that have on-site weather equipment. If your site happens to have an on site sensor, refer to the help section in LocusNOC for more details.

2 - Adding Components

Sites with Huawei inverters require the installer to configure 2-4 components: The inverter itself, the optimizers, and a Net meter and/or Battery if these components are included for the particular site.

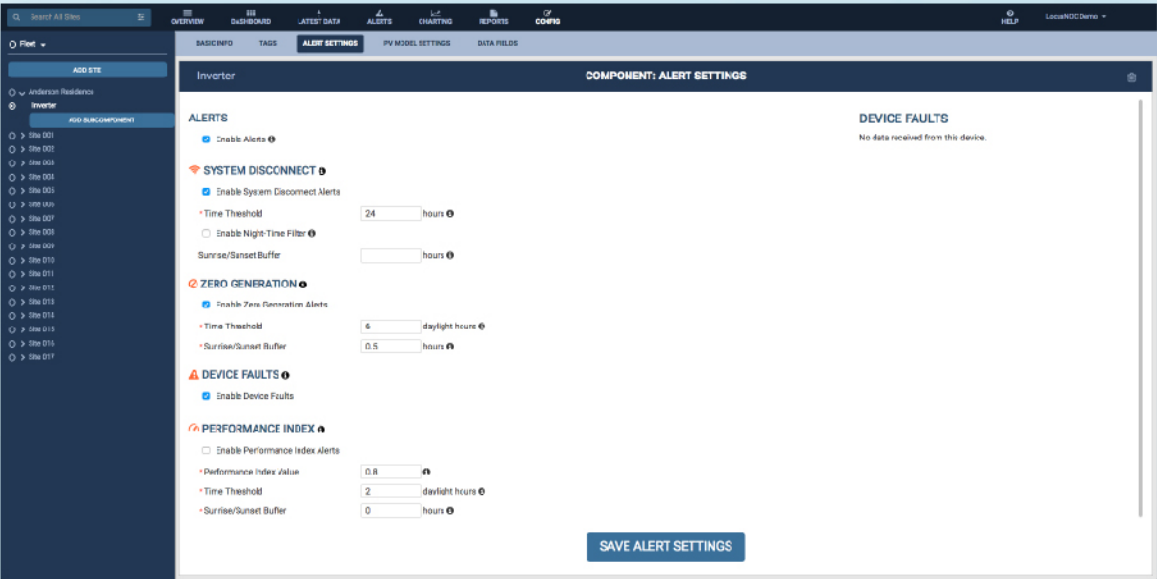
Adding the Inverter (REQUIRED)

1. While on the Config page, with the site selected in the Search-Browse Pane on the left, click ADD COMPONENT.
2. Enter information about the Inverter component.
- Component Type: Inverter
 - Component Name: Inverter (If there are multiple inverters, distinguish them with Inverter 01 and Inverter 02)
 - Node ID: This is the core unique identifier for the component and is important that it be entered correctly. This value is based on the component Serial Number.
 - This value for the Inverter is HUA.{Component Serial Number}.1
 - For example, if the serial number is 123456ABC789, the Node ID for the Inverter is HUA.123456ABC789.1
 - OEM: Huawei
 - Model: Choose the SUN2000L model of the component installed on site based on the size of the inverter.



Alert Settings

Alert Settings will be enabled by default for Device faults from the Inverter, as well as for System Disconnect and Zero Generation. System Disconnect and Zero Generation alerts are triggered from logic in the LocusNOC platform to recognize when a system is not sending data or sending data with zero values for generation. The specific thresholds and settings can be updated from the defaults if desired. More information on alert settings can be found in the Help section in LocusNOC.

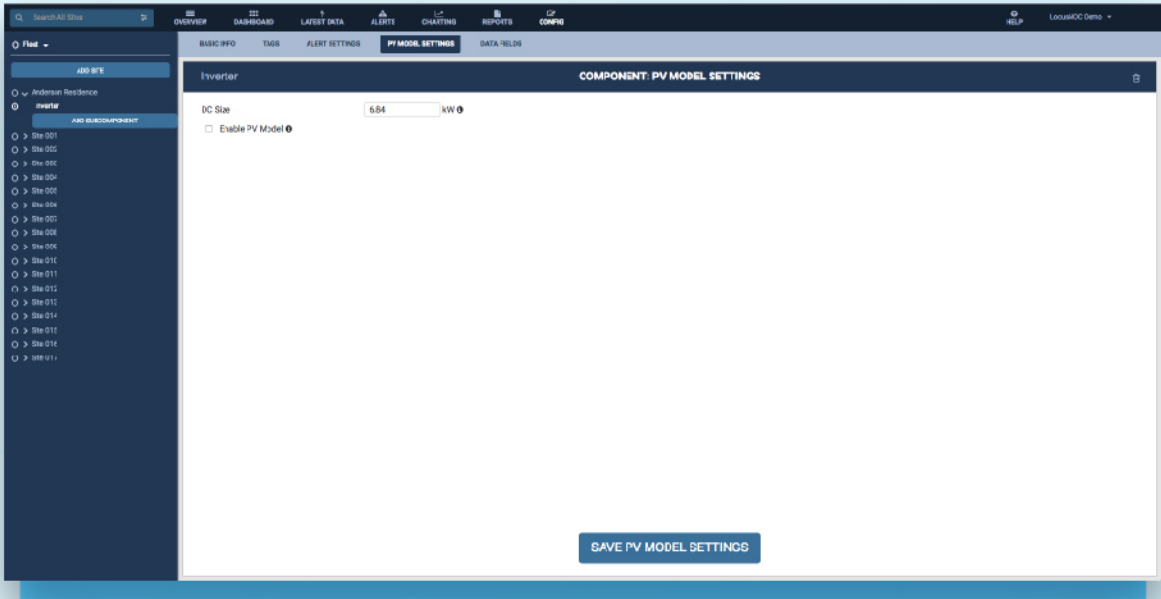


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Adding DC Size

It's important to add DC size for a couple reasons. First, this value is displayed in the homeowner MyLocusEnergy under System Size so there is a reference for the generation obtained. Additionally, adding this value will allow you to view Normalized Power and Energy, which can be useful in comparing performance from sites of varying sizes.

DC Size should be determined by the total DC capacity of the panels installed.



Please ignore the component tab for Data Fields as it does not currently apply for Huawei Inverter sites. For Tags, you can add any component-specific content you want to be searchable into these fields.

As mentioned above for Sites, enabling a PV Model for the Inverter requires on-site weather equipment and is likely not applicable for a residential site. If this is something you are interested in, you can refer to this article or contact support@locusenergy.com.

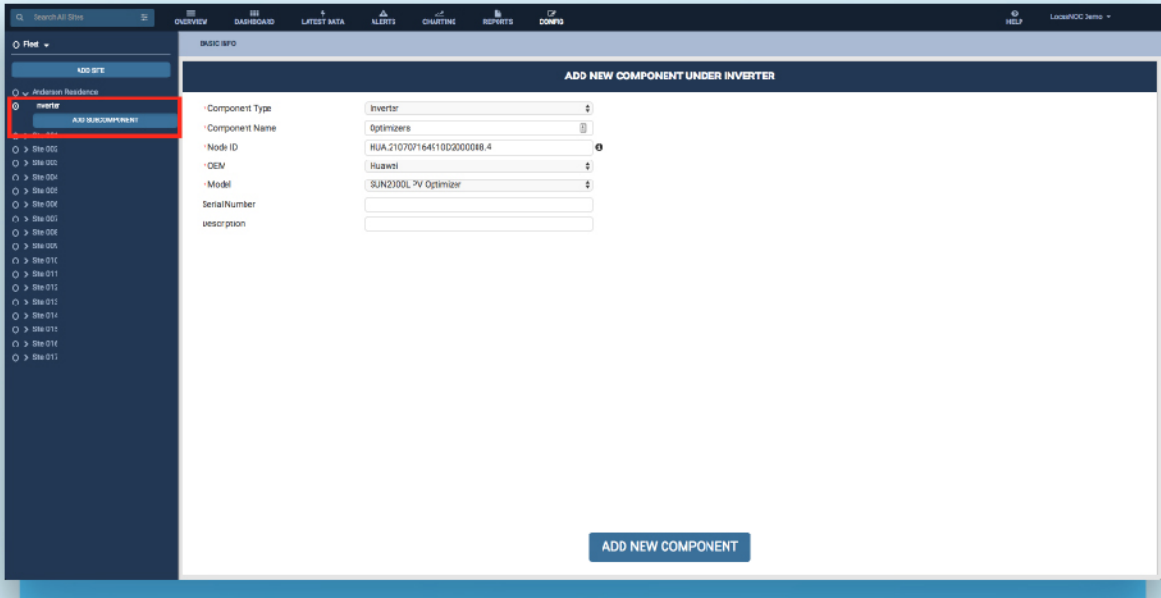
Adding the Optimizers (REQUIRED)

Optimizers are registered in LocusNOC as a subcomponent of the Inverter.

1. To add the Optimizers component, first make sure the Inverter is selected (it should still be from the previous step) and click ADD SUBCOMPONENT beneath it.
2. Enter information about the Optimizers component.

- Component Type: Inverter
- Component Name: Optimizers
- Node ID: This is the core unique identifier for the component and is important that it be entered correctly. This value is based on the component Serial Number.
 - This value for the Inverter is HUA.{Component Serial Number}.4
 - For example, if the serial number is 123456ABC789, the Node ID for the Inverter is HUA.123456ABC789.4
- OEM: Huawei
- Model: SUN2000L PV Optimizer

Like the Inverter, the Optimizers will also have alerts enabled. You can leave this alert settings as the defaults or update them as you see fit.



Adding the Battery

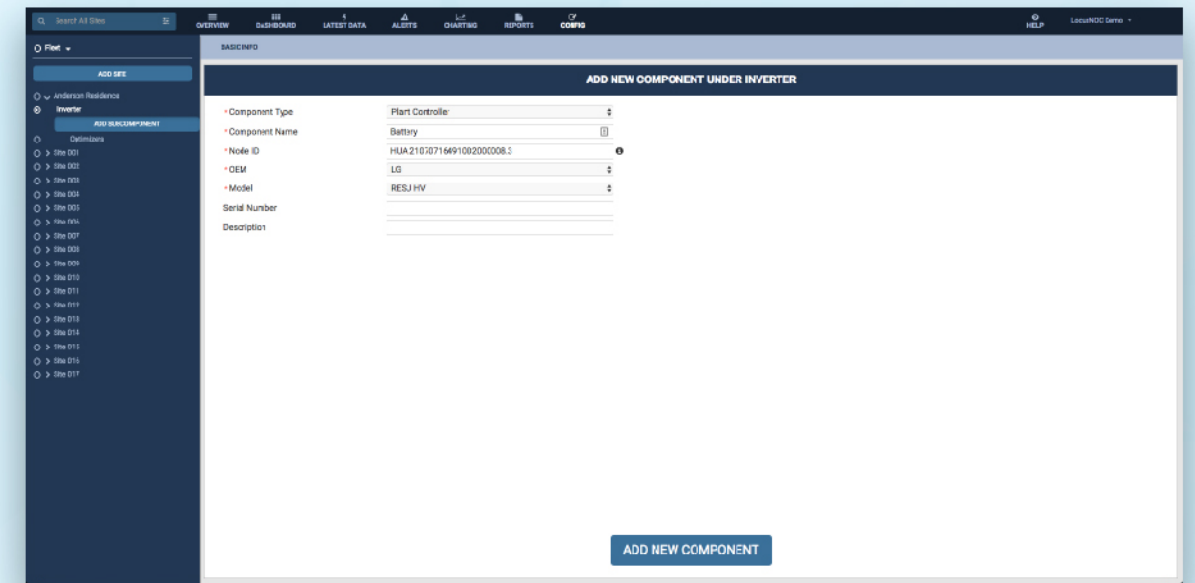
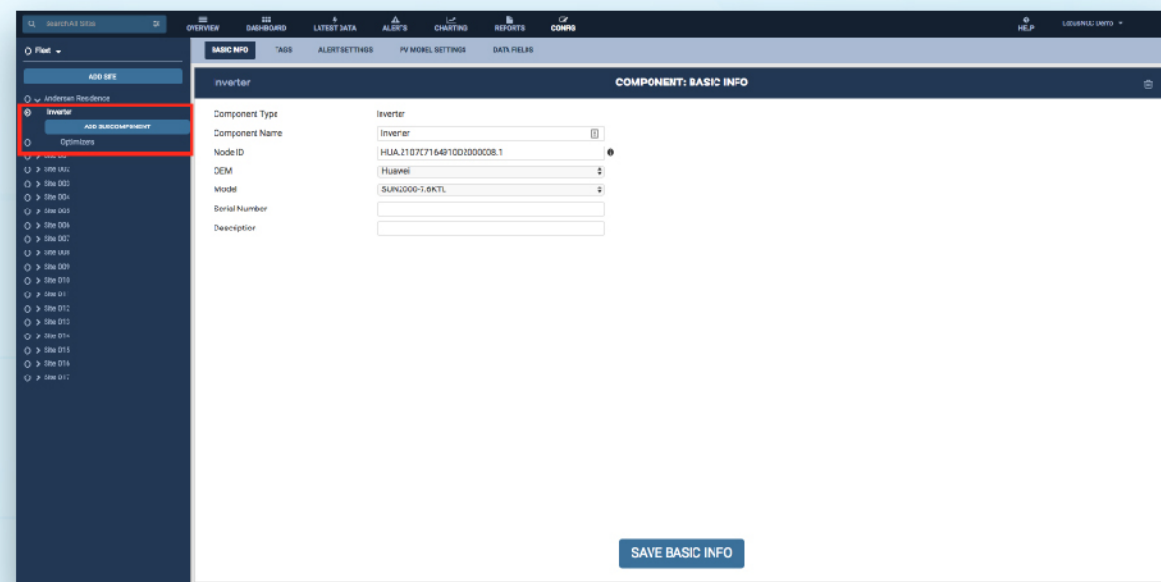
Not all sites installed will have a Battery included. If this particular site does, register the Battery as a subcomponent of the Inverter.

1. To add the Battery component, first make sure the Inverter is selected (you will need to reselect the inverter from the Search-Browse Pane on the left) and click ADD SUBCOMPONENT beneath it.
2. Enter information about the Battery component.
 - Component Type: Plant Controller
 - Component Name: Battery

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- **Node ID:** This is the core unique identifier for the component and is important that it be entered correctly. This value is based on the component Serial Number.
 - This value for the Inverter is **HUA.{Component Serial Number}.3**
 - For example, if the serial number is 123456ABC789, the Node ID for the Inverter is **HUA.123456ABC789.3**
- OEM: LG
- Model: RESU HV

Like the Inverter, the Battery will also have alerts enabled. You can leave this alert settings as the defaults or update them as you see fit.

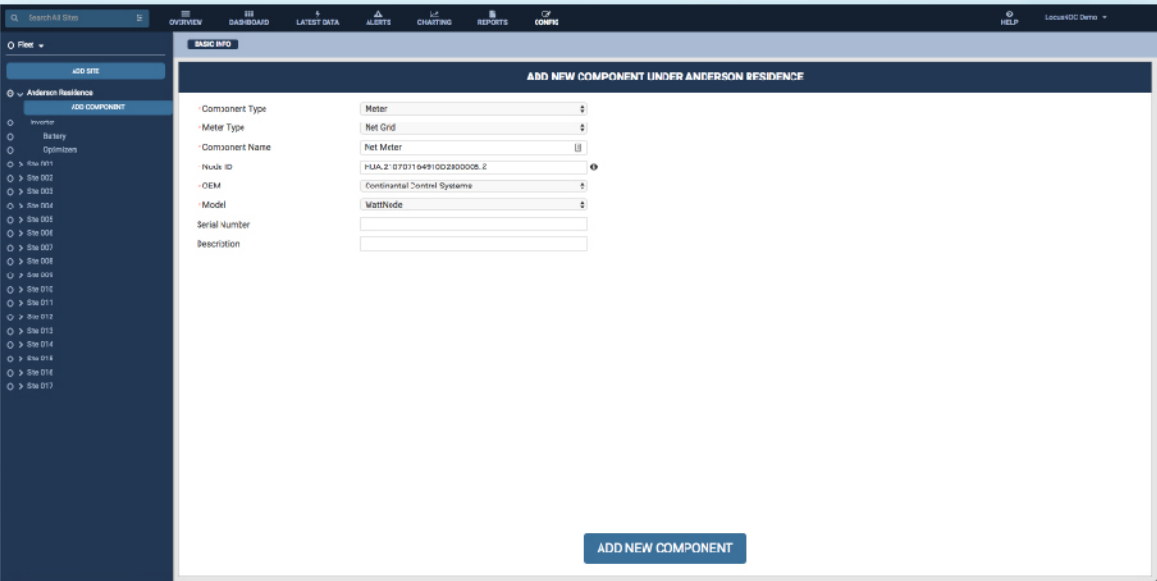
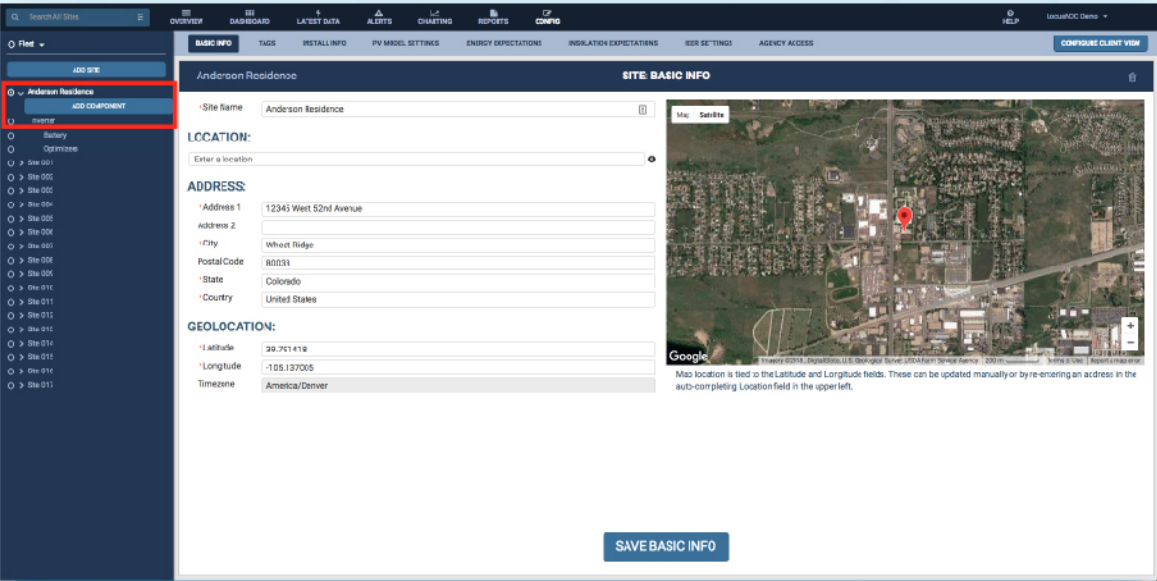


Adding the Net Meter

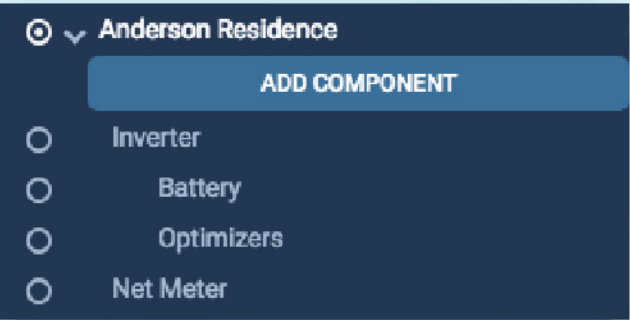
Not all sites installed will have a Net Meter included. If this particular site does, register the Net Meter as a component directly under the Site, like the Inverter.

1. To add the Net Meter component, first make sure the Site is selected (you will need to reselect the site from the Search-Browse Pane on the left) and click ADD COMPONENT beneath it.
2. Enter information about the Net Meter component.
 - Component Type: Meter
 - Meter Type: Net Grid
 - Component Name: Net Meter
 - **Node ID:** This is the core unique identifier for the component and is important that it be entered correctly. This value is based on the component Serial Number.
 - This value for the Inverter is **HUA.{Component Serial Number}.2**
 - For example, if the serial number is 123456ABC789, the Node ID for the Inverter is **HUA.123456ABC789.2**
 - OEM: Continental Control Systems
 - Model: WattNode

Like the Inverter, the Net Meter will also have alerts enabled. You can leave this alert settings as the defaults or update them as you see fit.



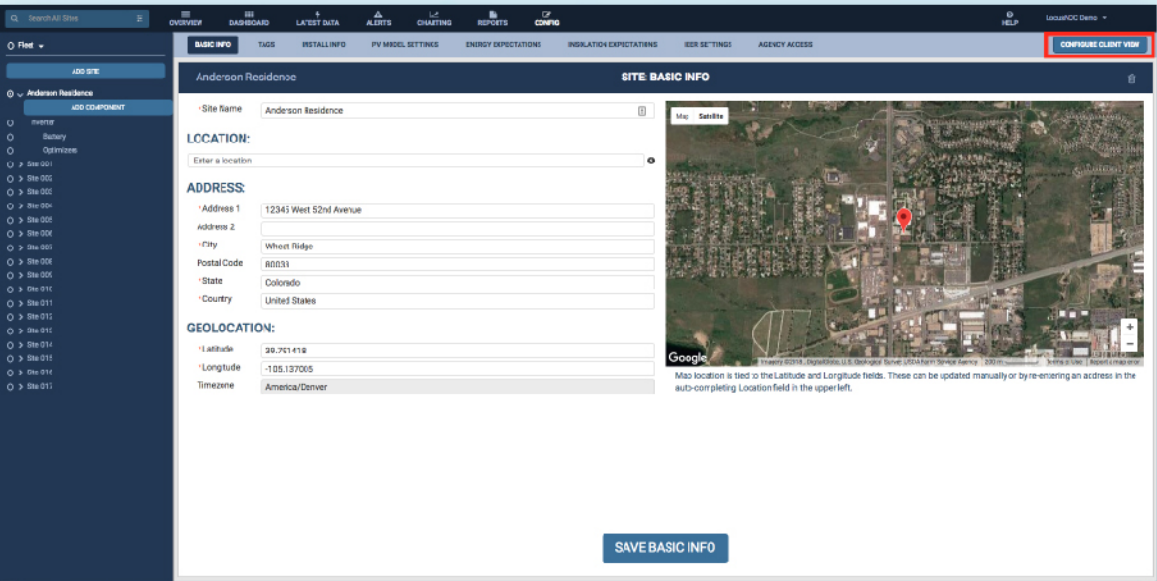
At this point, the Search-Browse Pane on the left should look like the following image. Again, note that the Battery and Net Meter are optional and will not be included on every site. Also note how the Battery and Optimizers are indented under the Inverter, as subcomponents, while the Inverter and Net Meter are hierarchically situated directly under the Site.

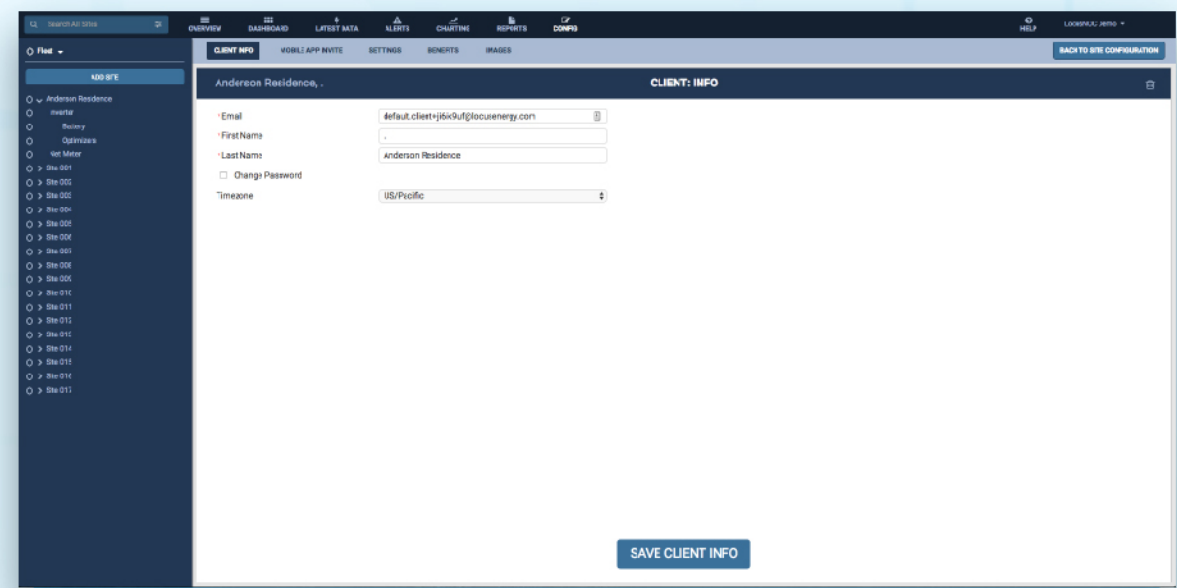


3 - Configuring Customer Information (REQUIRED)

This section allows you to update information for the end customer and their login portal. This is important as the information entered in this section will be used for their access to the MyLo-cusEnergy app.

1. When the site is selected, click on the button in the upper right for "Client View Configuration"

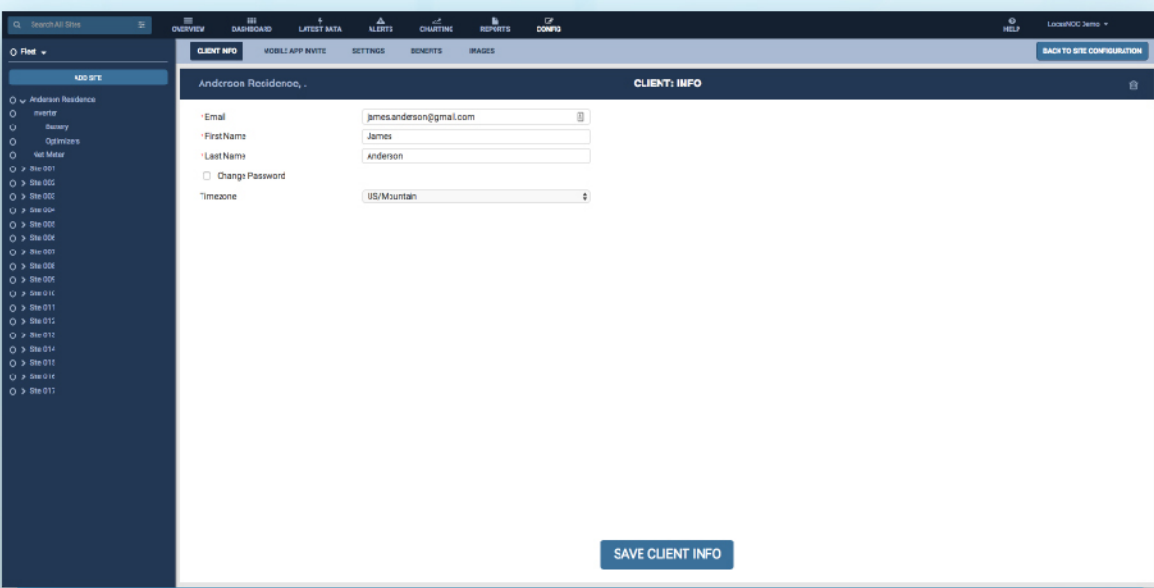




Basic Info

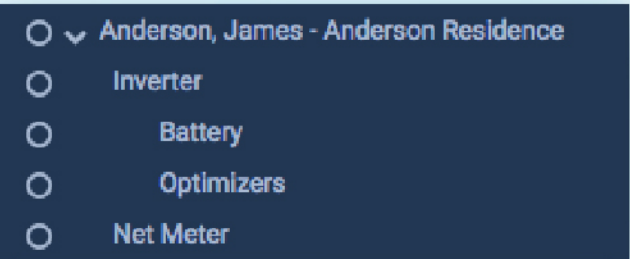
The LocusNOC app will have created default client information along with the initial creation of a site. This information will need to be replaced with the real client information.

- 1. Replace the Email with the homeowner’s email. This must be a real email as it will be where the app invitation gets sent and will become their username for the MyLocusEnergy app.
- 2. Enter the First and Last Name for the homeowner.
- 3. Select the Timezone. The timezone selected here will be the timezone that gets used in the MyLocusEnergy app, so it must be set to the actual timezone of the homeowner’s site.
- 4. Click Save Client Info



Please ignore the change password functionality - this does not apply to customers utilizing the MyLocusEnergy app.

Once the customer information has been updated and saved, the Search-Browse Pane on the left should look like the following image.

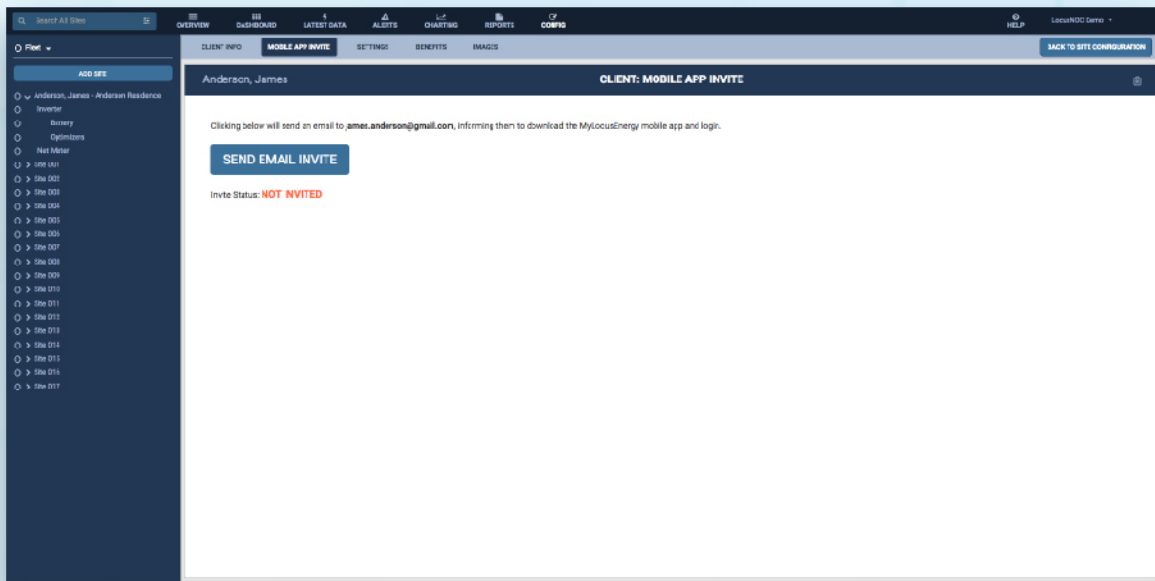


Mobile App Invite - MyLocusEnergy

Click to the Mobile App Invite tab. Verify that the customer email shown here is correct and then click the button to Send Email Invite to the homeowner. Only do this AFTER client information has been updated in steps 1-3 above.

Within a few minutes, the homeowner should receive an email with links to download the mobile app, along with their username and temporary password.

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Please ignore the additional tabs for Settings, Benefits, and Images - these do not apply to customers utilizing the MyLocusEnergy app.

A Note About Alerts

Alerts will show throughout the LocusNOC application. If you would like to also setup Email Notifications that include a digest of existing Alerts, this needs to be setup separately. Email Notifications can be setup for individual sites or components or for the entire fleet or a group. Refer to the Alerts article in the Help section of LocusNOC for more information.

You're Done!

That's it! Congratulations on successfully registering your customer's site in LocusNOC. Assuming the components are all connected and ready to measure live data, and the Node IDs of the components were all entered correctly, you should begin to see data uploaded into the system soon. It will take about 15 minutes before the registration data is fully ready in our system and data from the on-site components will be pulled once an hour.



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