

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Plant

GADS Solar Training - Module 3

May 2024

RELIABILITY | RESILIENCE | SECURITY

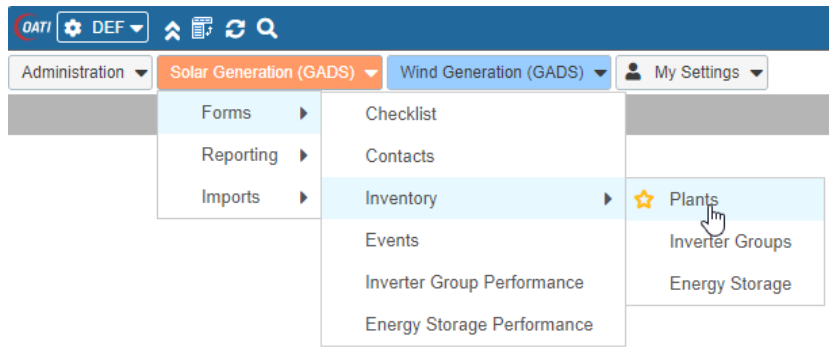


- Concepts
- Add Plant
- Update
- Validations
- Export, correct, and reimport
- Plant Import (Excel)
 - Append, Update, Full Replace

- All graphics (screen shots) in this presentation are courtesy of Open Access Technology International (OATI), Inc.

Plant – User Interface

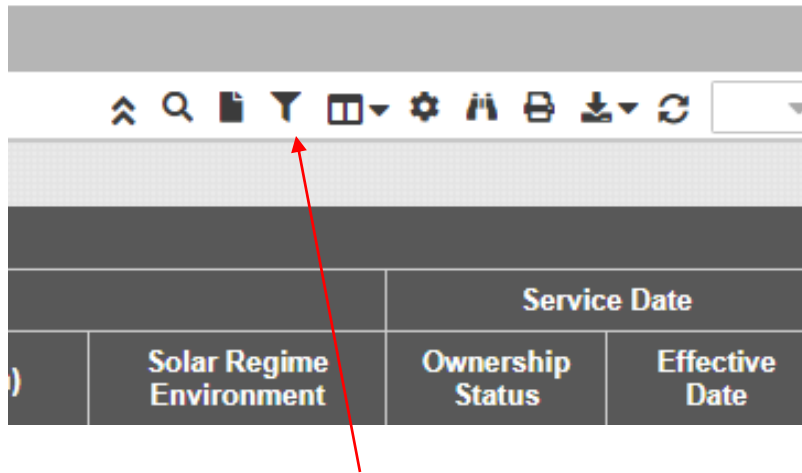
- Login to the NERC GADS OATI Wind and Solar Portal
- Click on Solar Generation (GADS)
- Hover over Forms and Inventory, then click on Plants



- A list of plants (if any) will appear

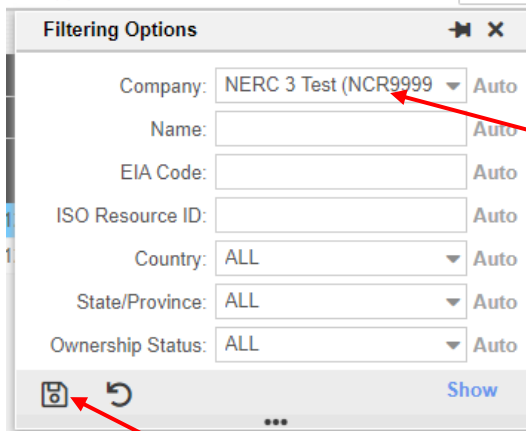
Solar Plants					
Plants Summary					
Filtered By: Company: NERC 3 Test (NCR99997 NERC 3 Test)					
Company			General Information		
Company Name	NERC ID	Region	Plant ID	Plant Name	EIA Code
NERC 3 Test	NCR99997	OTHER	1000002	Test 5	555
			1000001	test2Plant	1822

- You can edit the plant information by clicking on a plant or you can create a new plant
- You may need to filter (top right of screen) for a certain company before adding a new plant

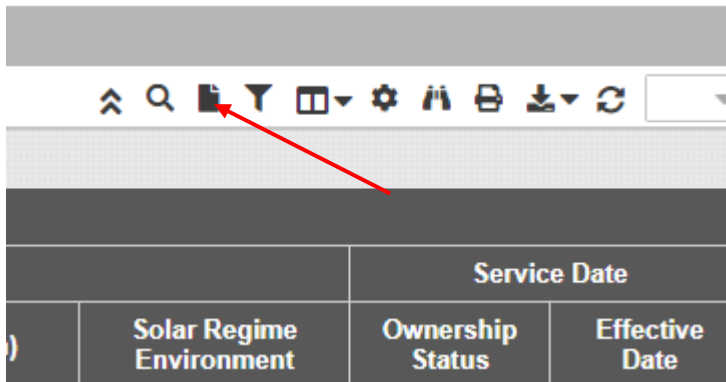


- Click the filter icon to select a company

- Select a company from the filter and click the floppy disk icon to filter



- Select the new icon to create a new plant



- The following screen will appear

Administration ▾ Solar Generation (GADS) ▾ Wind Generation (GADS) ▾ My Settings ▾

Solar Plants x Solar Plants Entry x

Plants Entry

Entity **Data Reporter**

NERC ID: NCR99997 Name: Leeth DePriest
 Company: NERC 3 Test Email: leeth.depriest@nerc.net
 Region: Other Phone Number:
Submission Date: 03/18/2024

Plant

Plant ID:
 Plant Name: Ownership Status: ID Request ▾
 Plant EIA Code: Effective Date:
 ISO Resource ID:
 Connected Energy Storage:

Plant Location

Country: Time Zone: Solar Regime Environment:
 State/Province: Plant Location Latitude (*N): Global Horizontal Irradiance (kWh/m²):
 Nearest City: Plant Location Longitude (*W): Inter-Annual Variance of Irradiance (%):
Elevation (m):

Inverter Groups

Inverter Group ID	Inverter Group Name	Commissioning Date	Installed Capacity	Total Number of Inverters	Inverter Manufacturer

Reporting Periods

2024 **Default**
 Default
 Everything

Reporting Status: Please select one... ▾
 Capacity At POI (MW):

- Let's look closer at each section

- The entity (company) data is filled in because the company has already been created

Entity	Data Reporter
NERC ID: NCR99997	Name: Leeth DePriest
Company: NERC 3 Test	Email: leeth.depriest@nerc.net
Region: Other	Phone Number:
	Submission Date: 03/18/2024

- This part of the screen is for plant information entry

Plant

Plant ID:

Plant Name: * 1

Plant EIA Code: * 2

ISO Resource ID: 3

Connected Energy Storage: * 4

Ownership Status: * ID Request 5

Effective Date: 6

1. Enter the plant name. Use the same plant name as reported to EIA.
2. Enter the EIA plant Code (US only)
3. If applicable, enter the identifier assigned by an ISO or RTO
4. Select the whether the plant has on-site energy storage from the picklist
5. Select the plant ownership status from the picklist - Select **ID Request** for a new plant
6. Enter the effective date of the plant ownership status as the commissioning date of the plant site.
 - For updates to an existing plant, enter the date the change became effective

- This part of the screen is for plant location entry

The screenshot shows a web form titled "Adding a New Plant" with two main sections. The left section, labeled "Plant Location", contains fields for "Country:", "State/Province:", "Nearest City:", "Solar Regime Environment:", "Global Horizontal Irradiance (kWh/m²):", and "Inter-Annual Variance of Irradiance (%):". The right section contains fields for "Time Zone:", "Plant Location Latitude (°N):", "Plant Location Longitude (°W):", and "Elevation (m):". Red boxes with numbers 1 through 10 are overlaid on the form to indicate the sequence of data entry: 1 (Country), 2 (State/Province), 3 (Nearest City), 4 (Time Zone), 5 (Latitude), 6 (Longitude), 7 (Elevation), 8 (Solar Regime Environment), 9 (Global Horizontal Irradiance), and 10 (Inter-Annual Variance of Irradiance).

1. Select the country from the picklist
2. Select the state or province from the picklist
3. Enter the nearest city
4. Select the time zone used for GADS reporting (not necessarily where the unit is located) from the picklist
5. Enter the plant latitude (a value from 20 through 65)
6. Enter the plant longitude (a value from 50 thru 135)
7. Enter the elevation of the physical location of the plant in meters (m)
8. Select the solar regime environment from the picklist
9. Enter the annual Global Horizontal Irradiance (a value from 800 thru 2200)
10. Enter the inter-annual variance of global horizontal irradiance (GHI) for the specific site

- This part of the screen is for reporting period entry
 - **Reporting Periods** are defined on Company Reporting obligations (by Year)
 - **Default Reporting Period** is a placeholder to populate Reporting Periods

Reporting Periods

<input type="button" value="2024"/>	2024	<input type="text" value="1"/>
<input type="button" value="Default"/>		<input type="text" value="2"/>
<input type="button" value="Everything"/>		
		Reporting Status: <input type="text" value="Please select one..."/>
		Capacity At POI (MW): <input type="text"/>
	Default	<input type="text" value="3"/>
		<input type="text" value="4"/>
		Reporting Status: <input type="text" value="Please select one..."/>
		Capacity At POI (MW): <input type="text"/>

1. Select the current year (2024) reporting status from the picklist
 2. Enter the current year (2024) capacity at the point of interconnection
 3. Select the Default reporting status from the picklist
 4. Enter the Default capacity at the point of interconnection
- Press the save button (floppy disk icon) on the bottom left of screen when all information has been entered

Plant – Excel Template

Plant Inventory Design Data										Plant I
		EIA Plant		ISO Resource						
Entity ID	Plant ID	Plant Name	Code	ID	Country	Nearest City	State/Province	Time Zone	Latitude	
1	2	3	4	5	6	7	8	9	10	

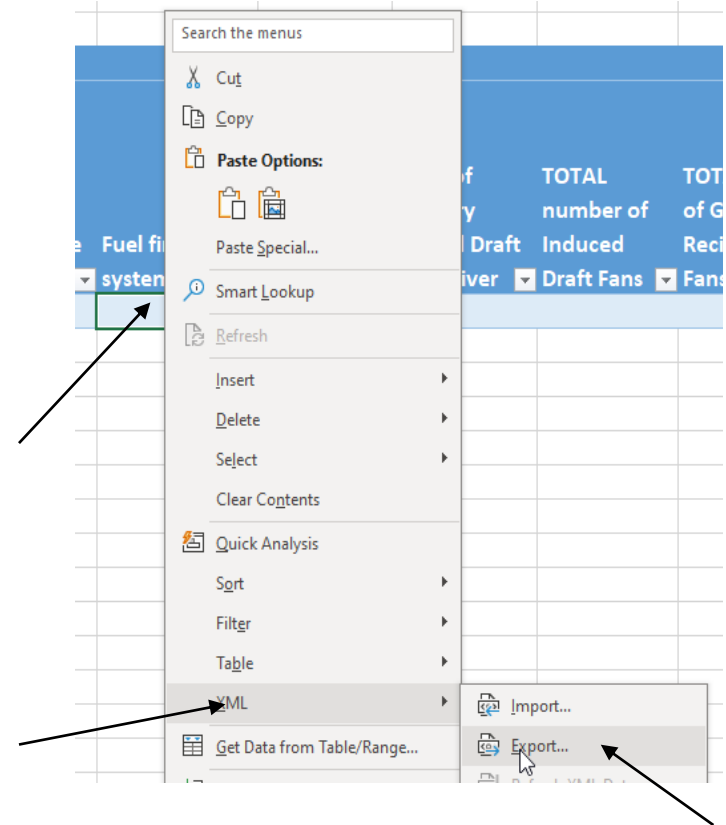
- Remember the pop-up windows provide helpful information

1. Enter the company NCR (NERC Compliance Registry) number or voluntary reporting ID
2. Enter the plant ID assigned by the GADS Solar application. Leave blank for new plants.
3. Enter the plant name. Use the same plant name as reported to EIA.
4. Enter the EIA plant Code (US only)
5. If applicable, enter the identifier assigned by an ISO or RTO
6. Select the country from the picklist
7. Enter the nearest city
8. Select the state or province from the picklist
9. Select the time zone used for GADS reporting (not necessarily where the unit is located) from the picklist.
10. Enter the plant latitude (a value from 20 through 65)

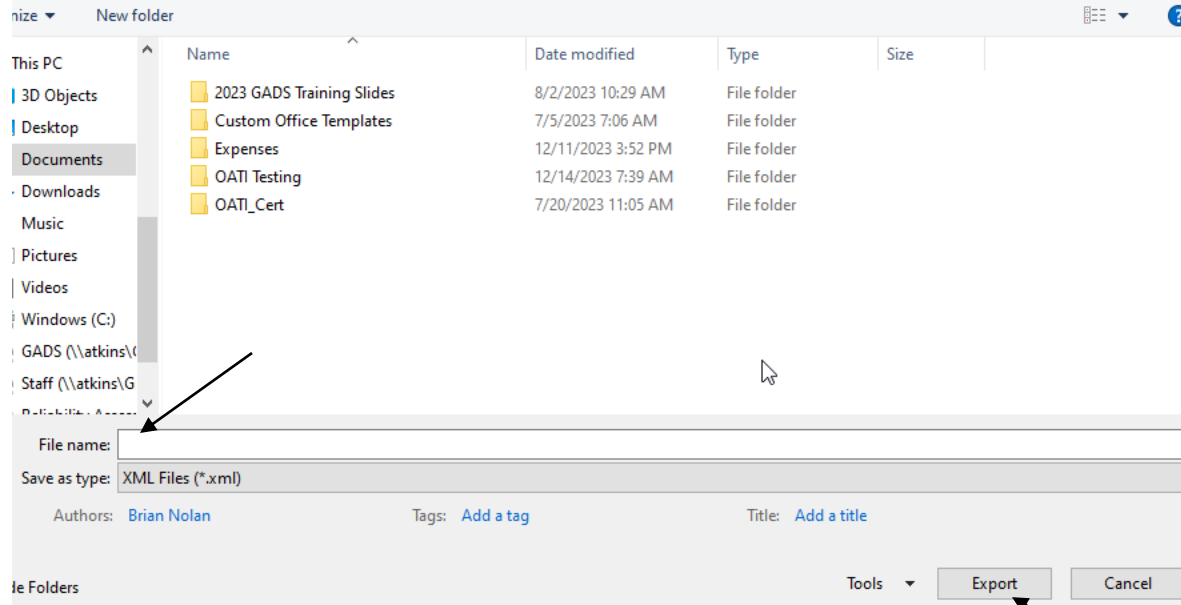
Location		Solar Regime	Global Horizontal	Inter-Annual Variance	Plant Capacity	On-Site Connected	Plant Ownership	Effective
Longitude	Elevation (m)	Environment	Irradiance	of Irradiance	at POI	Energy Storage	Status	Date
1	2	3	4	5	6	7	8	9

- Remember the pop-up windows provide helpful information
1. Enter the plant longitude (a value from 50 thru 135)
 2. Enter the elevation of the physical location of the plant in meters (m)
 3. Select the solar regime environment from the picklist
 4. Enter the Global Horizontal Irradiance (kwh/square meter)
 5. Enter the inter-annual variance of global horizontal irradiance (GHI) for the specific site
 6. Enter the capacity at the point of interconnection (capacity of interconnection agreement)
 7. Select the whether the plant has on-site energy storage from the picklist
 8. Select the plant ownership status from the picklist
 9. Enter the effective date of the plant ownership status. Leave blank for new plants.

- You are now ready to export your Plant configuration file to OATI
- Save your Excel template to a place of your choosing
- Next create the XML file for the Plant configuration data
 - Make sure that you are on the “Plant” worksheet tab
 - Right click a cell somewhere on a row of data on the “Plant” worksheet
 - Select XML from the popup menu
 - Select export from the popup menu

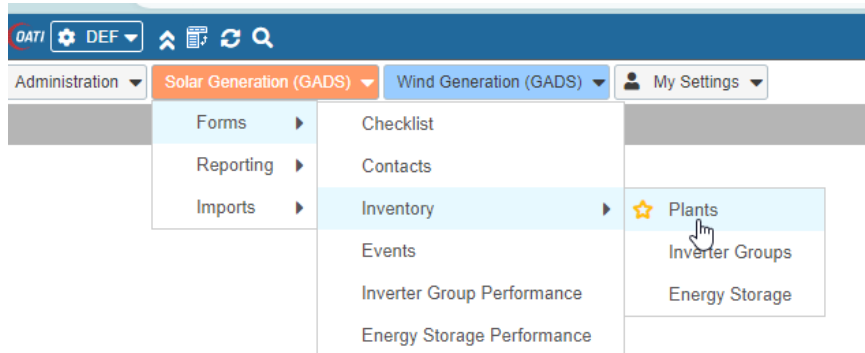


- Name the file, select where you want the file saved, and press the export button



- Make note of your file name and where you saved it

- Next import the XML file into the OATI system
 - Log into the OATI Solar GADS system
 - Navigate to the appropriate menu item on the Solar interface
 - Click on SOLAR Generation (GADS) on the top menu ribbon
 - Click Forms and then Inventory in the dropdown menu
 - Click Plants in the dropdown menu

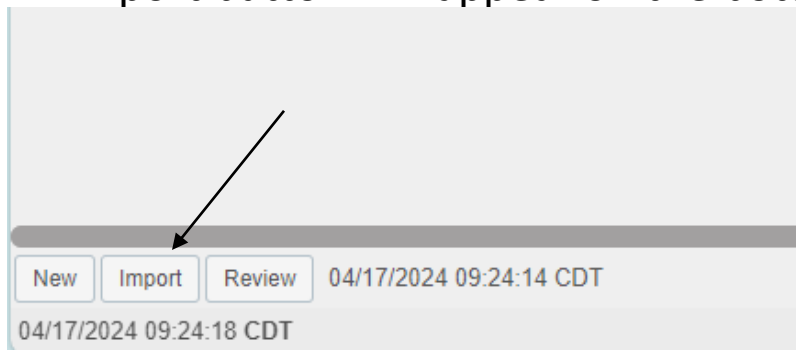


The screenshot shows the 'Solar Plants' summary table. The table has columns for Company Name, NERC ID, Region, Plant ID, Plant Name, EIA Code, Connected Energy Storage, and Country. The data is as follows:

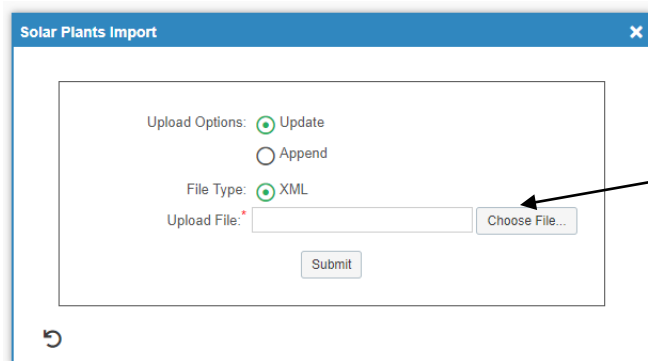
Company			General Information				
Company Name	NERC ID	Region	Plant ID	Plant Name	EIA Code	Connected Energy Storage	Country
NERC 3 Test	NCR99997	OTHER	1000002	Test 5	555	Yes	Other
			1000001	test2Plant	1822	Yes	Other
NERC test	NCR99999	OTHER	1000000	12345678901234567...	877	Yes	Other

- A list of previously created plants (if any) will appear

- An Import button will appear on the bottom left of the screen

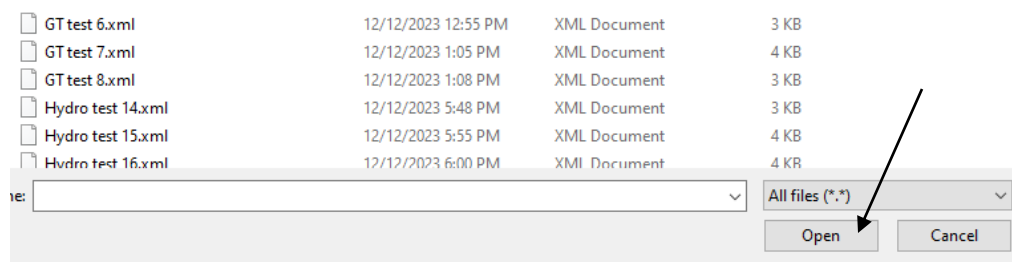


- Press the import button and the popup below will appear

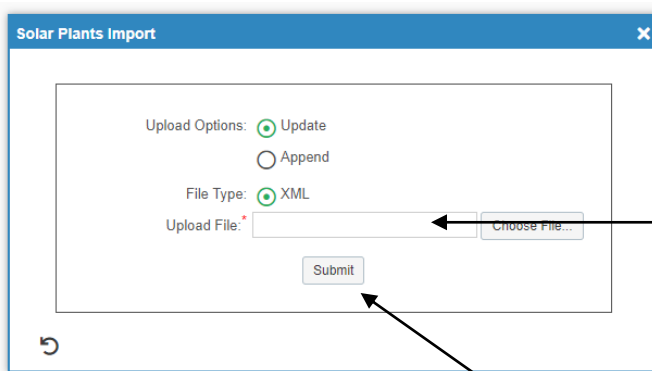


- Click the “Choose File” button on the Solar Plants Import popup and navigate to where you saved your XML file

- Select the file you just created and press the “Open” button



- Click the submit button on the Solar Plants Import popup shown below



File chosen in previous step will appear here

- If you correctly entered the data in your spreadsheet, your Plant configuration data should load without issue and is complete.



Questions and Answers

gadssolar@nerc.net