

PowerGADS as Used Under NYISO Rules

Market Training
E-Learning Module
2025

Note: Information provided regarding North American Electric Reliability Corporation (NERC) rules and requirements is provided solely as an overview for background and context for NYISO requirements. The NYISO is not informing or advising attendees on obligations related to NERC requirements or procedures. After completing this training, please direct any GADS-related inquiries to stakeholder_services@nyiso.com

NYISO PowerGADS (PGADS) Portal

- **Market Participants (MPs) enter GADS Data directly via NYISO PowerGADS (PGADS) portal**
 - PGADS portal accepts Event and Performance data
- **MPs can correct errors identified by the PGADS portal during the submittal process**
- **PGADS Portal can provide reports specific to ICAP markets, including**
 - Average Equivalent Demand Forced Outage Rate (AEFORd) Reports
 - Event & Performance Data Reports

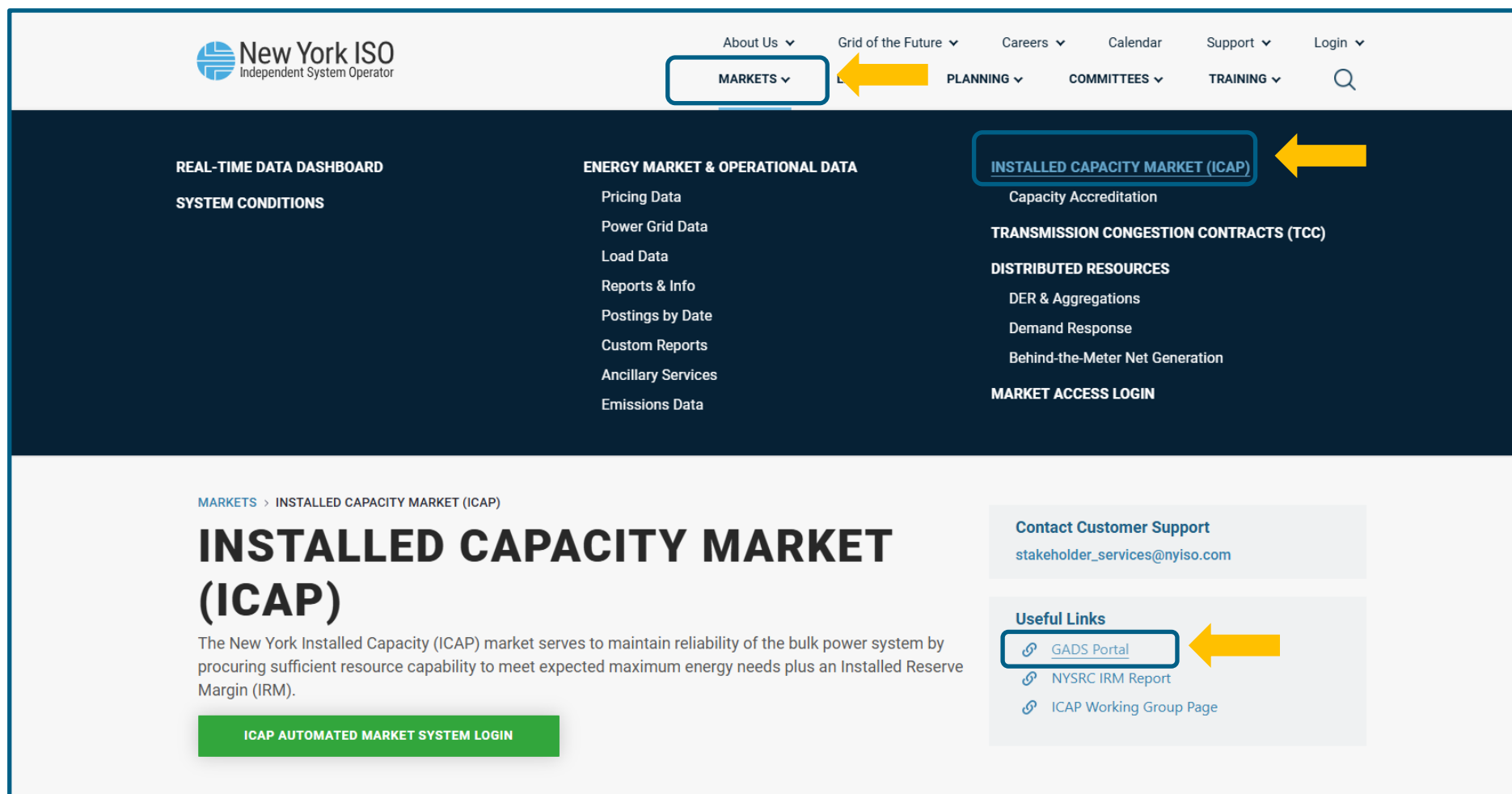
PGADS Portal

■ User Portal Requirements

- NAESB Digital Certificate* (linked to MIS User Account)
- MIS User Account
 - User Account must have the “GADS – GADS Observer” privilege
- Contact NYISO GADS Administrator (GADS_Info@nyiso.com) to add user to the PGADS Portal

*Please refer to the ‘NAESB Digital Certificate Tutorial’ for details on how to obtain a NAESB certificate

Access to NYISO PGADS Portal



The screenshot displays the New York ISO website interface. At the top, the New York ISO logo and navigation menu are visible. The 'MARKETS' dropdown menu is highlighted with a blue box and a yellow arrow. Below this, the 'INSTALLED CAPACITY MARKET (ICAP)' link is highlighted with a blue box and a yellow arrow. The main content area shows the 'INSTALLED CAPACITY MARKET (ICAP)' page, which includes a description of the market and a green button for 'ICAP AUTOMATED MARKET SYSTEM LOGIN'. On the right side, the 'Useful Links' section is highlighted with a blue box and a yellow arrow, containing the 'GADS Portal' link.

New York ISO
Independent System Operator

About Us ▾ Grid of the Future ▾ Careers ▾ Calendar Support ▾ Login ▾

MARKETS ▾

PLANNING ▾ COMMITTEES ▾ TRAINING ▾

REAL-TIME DATA DASHBOARD

SYSTEM CONDITIONS

ENERGY MARKET & OPERATIONAL DATA

Pricing Data

Power Grid Data

Load Data

Reports & Info

Postings by Date

Custom Reports

Ancillary Services

Emissions Data

INSTALLED CAPACITY MARKET (ICAP)

Capacity Accreditation

TRANSMISSION CONGESTION CONTRACTS (TCC)

DISTRIBUTED RESOURCES

DER & Aggregations

Demand Response

Behind-the-Meter Net Generation

MARKET ACCESS LOGIN

MARKETS > INSTALLED CAPACITY MARKET (ICAP)

INSTALLED CAPACITY MARKET (ICAP)

The New York Installed Capacity (ICAP) market serves to maintain reliability of the bulk power system by procuring sufficient resource capability to meet expected maximum energy needs plus an Installed Reserve Margin (IRM).

ICAP AUTOMATED MARKET SYSTEM LOGIN

Contact Customer Support
stakeholder_services@nyiso.com


Useful Links

GADS Portal

NYSRC IRM Report

ICAP Working Group Page

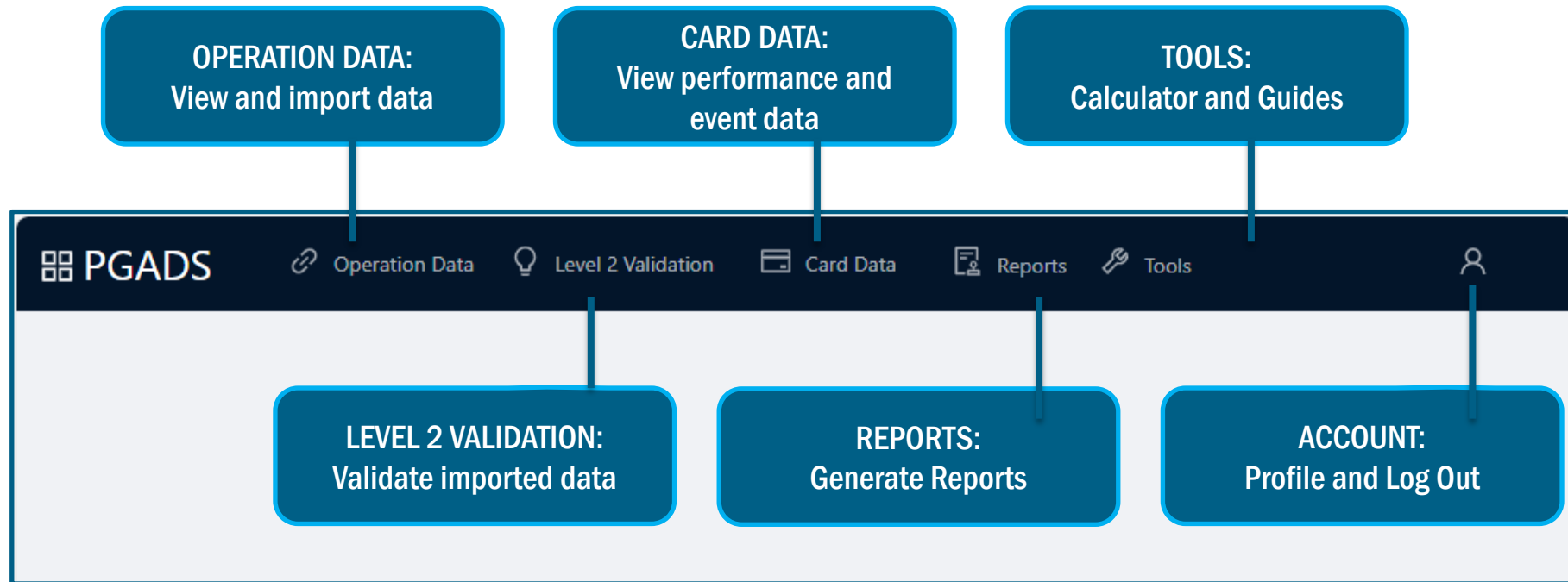
PGADS Portal Login Screen

 **New York ISO**
Independent System Operator

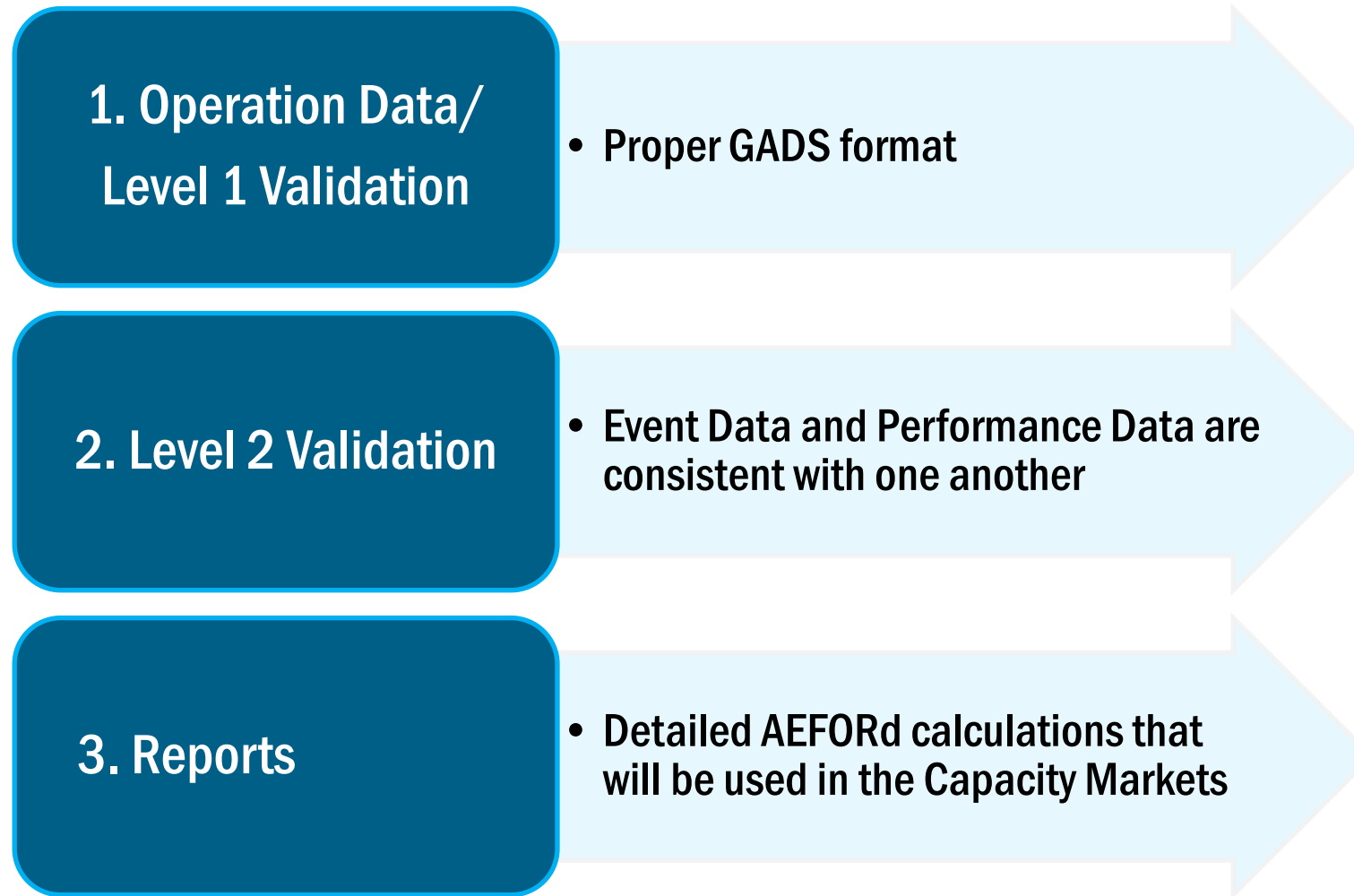
Log into your NYISO account

Active MIS user account required with PowerGADS permissions and linked NAESB certificate.

PGADS Portal Homepage

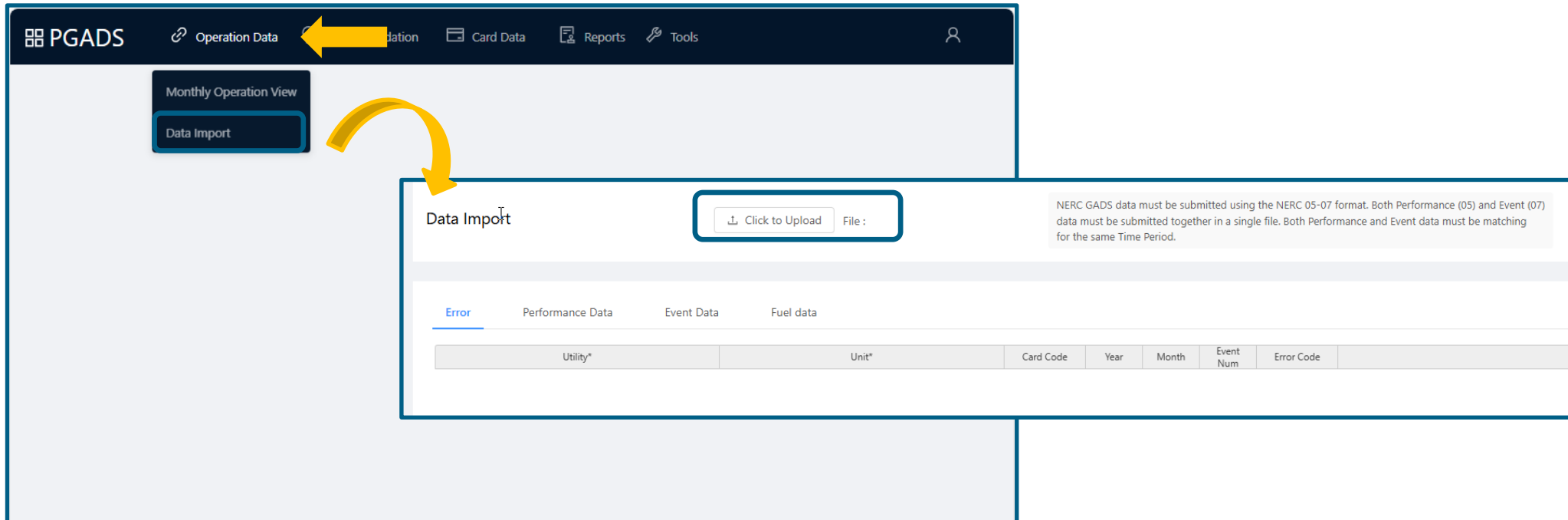


Upload and Process Phases



PGADS Portal Options: Operational Data

- Data Import
 - A valid GADS ASCII data file must be created prior to logging into the PGADS portal



PGADS

Operation Data

Monthly Operation View

Data Import

Data Import

Click to Upload File :

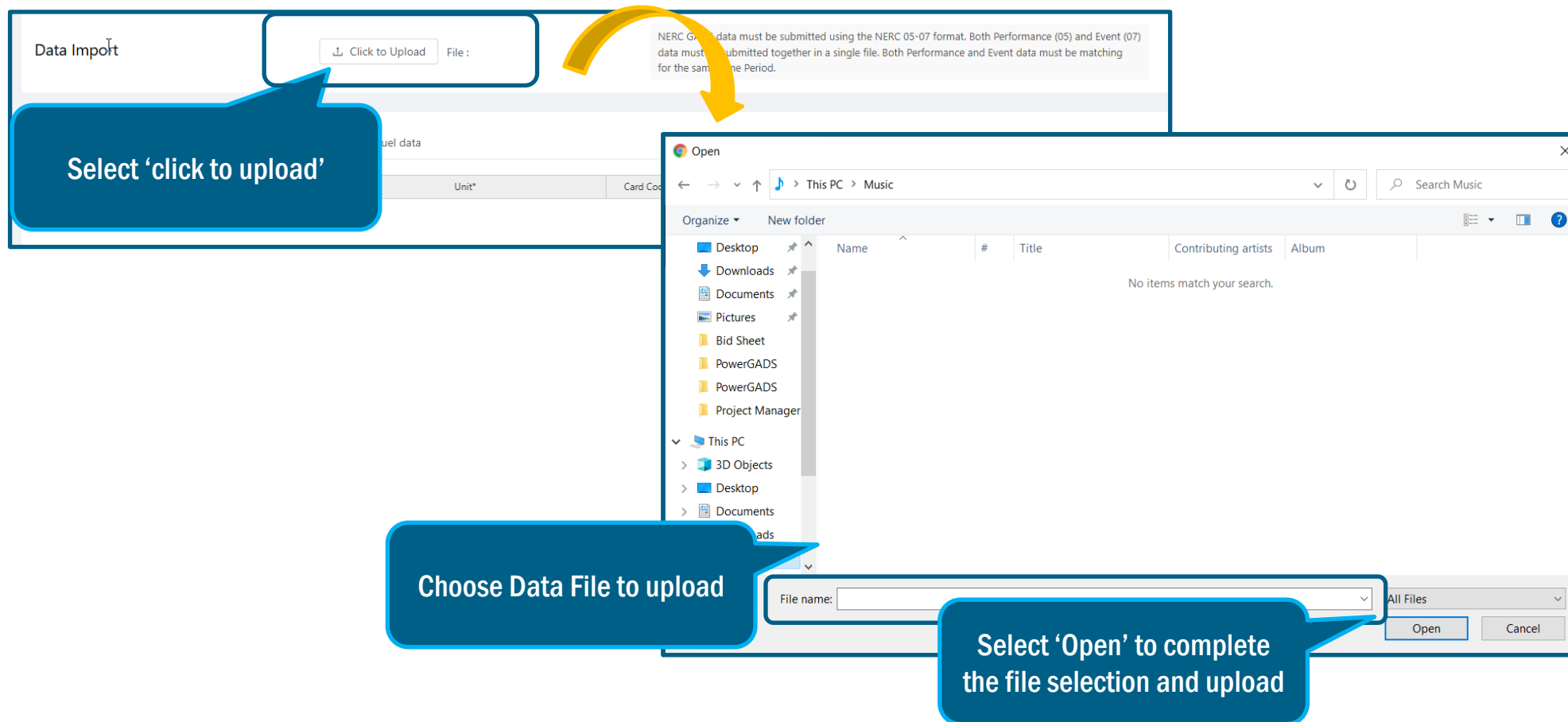
NERC GADS data must be submitted using the NERC 05-07 format. Both Performance (05) and Event (07) data must be submitted together in a single file. Both Performance and Event data must be matching for the same Time Period.

Error Performance Data Event Data Fuel data

Utility*	Unit*	Card Code	Year	Month	Event Num	Error Code
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PGADS Portal Options: Operational Data

- Data Import Process



The screenshot illustrates the data import process in the PGADS portal. It shows a 'Data Import' section with a 'Click to Upload' button and a 'File' input field. A yellow arrow points from the 'Click to Upload' button to a file selection dialog box. The dialog box shows the 'This PC' view with the 'Music' folder selected. A callout points to the 'Open' button in the dialog box. A text box at the top right provides instructions: 'NERC GADS data must be submitted using the NERC 05-07 format. Both Performance (05) and Event (07) data must be submitted together in a single file. Both Performance and Event data must be matching for the same time Period.'

Select 'click to upload'

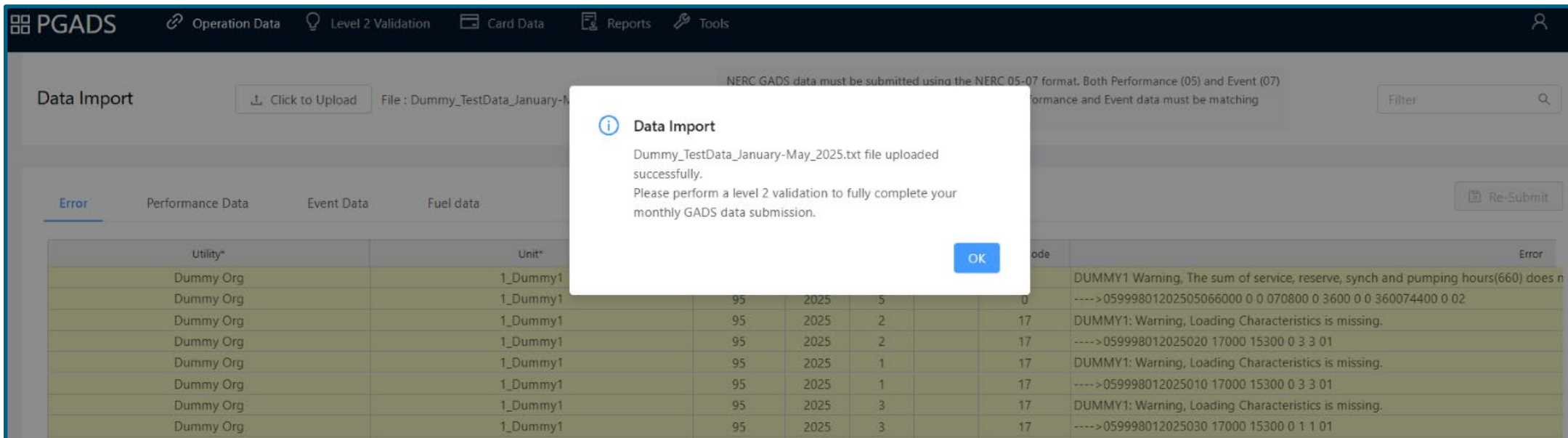
Choose Data File to upload

Select 'Open' to complete the file selection and upload

NERC GADS data must be submitted using the NERC 05-07 format. Both Performance (05) and Event (07) data must be submitted together in a single file. Both Performance and Event data must be matching for the same time Period.

PGADS Portal Options: Operational Data

- **Level 1 Validation**
 - Performed automatically upon upload
 - Data Import will be followed by Level 1 Validation of the uploaded file
 - Confirms approved codes and values are used
 - Confirms necessary data fields are filled in
 - Successful Level 1 Validation will prompt a request to perform a Level 2 Validation

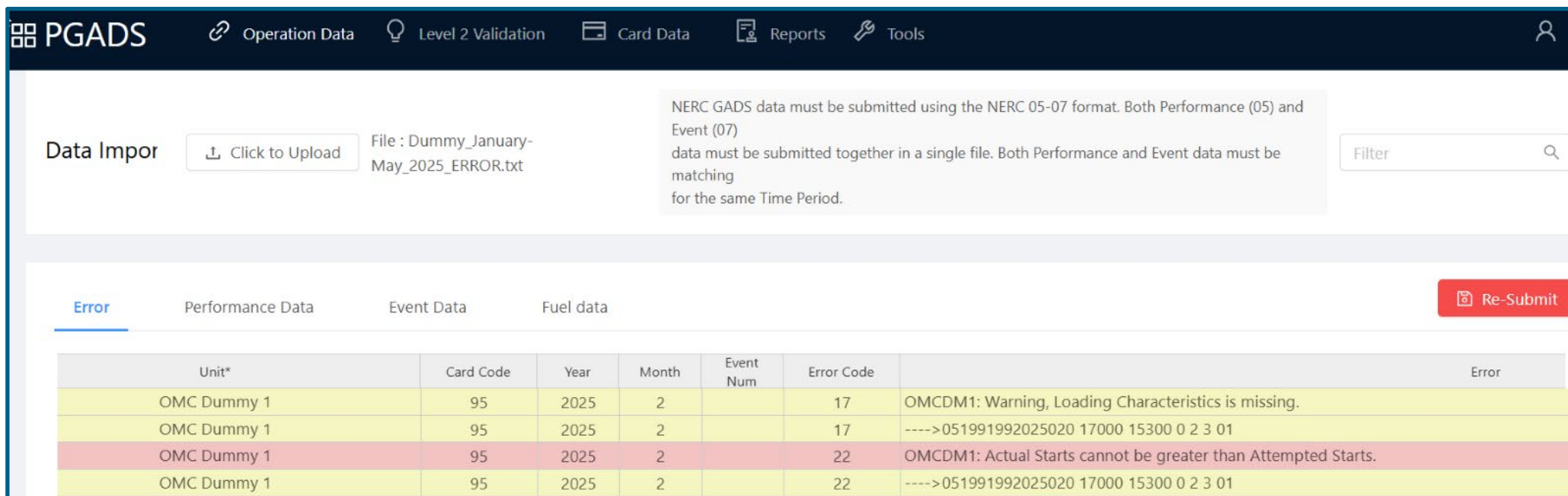


The screenshot shows the PGADS portal interface. At the top, there's a navigation bar with links: PGADS, Operation Data, Level 2 Validation, Card Data, Reports, and Tools. The main section is titled "Data Import" and includes a "Click to Upload" button and a file name "Dummy_TestData_January-May_2025.txt". A modal window titled "Data Import" is displayed, stating: "Dummy_TestData_January-May_2025.txt file uploaded successfully. Please perform a level 2 validation to fully complete your monthly GADS data submission." Below the modal, there's a table with columns: Utility*, Unit*, and a large column for data. The table contains several rows of dummy data. On the right side of the table, there's an "Error" column with messages like "DUMMY1 Warning, The sum of service, reserve, synch and pumping hours(660) does not match" and "DUMMY1: Warning, Loading Characteristics is missing."

Utility*	Unit*	
Dummy Org	1_Dummy1	
Dummy Org	1_Dummy1	95 2025 5 0
Dummy Org	1_Dummy1	95 2025 2 17
Dummy Org	1_Dummy1	95 2025 2 17
Dummy Org	1_Dummy1	95 2025 1 17
Dummy Org	1_Dummy1	95 2025 1 17
Dummy Org	1_Dummy1	95 2025 3 17
Dummy Org	1_Dummy1	95 2025 3 17

PGADS Portal Options: Operational Data

- Level 1 Validation - Errors
 - An error log will display
 - Red = Fatal Error: the entire content of the file is rejected until individual errors are corrected
 - Yellow = Warning: the system will accept the data initially, but all warnings should eventually be cleared



PGADS

Operation Data Level 2 Validation Card Data Reports Tools

Data Import [Click to Upload](#) File : Dummy_January-May_2025_ERROR.txt

NERC GADS data must be submitted using the NERC 05-07 format. Both Performance (05) and Event (07) data must be submitted together in a single file. Both Performance and Event data must be matching for the same Time Period.

Filter

[Error](#) Performance Data Event Data Fuel data [Re-Submit](#)

Unit*	Card Code	Year	Month	Event Num	Error Code	Error
OMC Dummy 1	95	2025	2		17	OMCDM1: Warning, Loading Characteristics is missing.
OMC Dummy 1	95	2025	2		17	---->051991992025020 17000 15300 0 2 3 01
OMC Dummy 1	95	2025	2		22	OMCDM1: Actual Starts cannot be greater than Attempted Starts.
OMC Dummy 1	95	2025	2		22	---->051991992025020 17000 15300 0 2 3 01


Please refer to Appendix A of the PGADS Users Guide for a full list of Level 1 and Level 2 errors

PGADS Portal Options: Operational Data

- Level 1 Validation - Errors
 - An error log will display
 - Line 1 of the error provides a description of the error
 - Line 2 of the error provides the line in the data causing the error

PGADS
Operation Data
Level 2 Validation
Card Data
Reports
Tools


Data Import

 Click to Upload

File : Dummy_January-May_2025_ERROR.txt

NERC GADS data must be submitted using the NERC 05-07 format. Both Performance (05) and Event (07) data must be submitted together in a single file. Both Performance and Event data must be matching for the same Time Period.

Error
Performance Data
Event Data
Fuel data

 Re-Submit

Unit*	Card Code	Year	Month	Event Num	Error Code	Error
OMC Dummy 1	95	2025	2		17	OMCDM1: Warning, Loading Characteristics is missing.
OMC Dummy 1	95	2025	2		17	---->051991992025020 17000 15300 0 2 3 01
OMC Dummy 1	95	2025	2		22	OMCDM1: Actual Starts cannot be greater than Attempted Starts.
OMC Dummy 1	95	2025	2		22	---->051991992025020 17000 15300 0 2 3 01

PGADS Portal Options: Operational Data

■ Level 1 Validation - Errors

• Correcting the error

- Option 1 – correct the GADS data offline and re-upload the corrected file
- Option 2 – navigate to the performance or event tab and edit the data online*

NOTE: Not all errors and warnings can be corrected within the PGADS portal

Any navigation away from the screen before selecting re-submit will result in a loss of data

Select the 'Performance Data' tab to correct errors

Re-submit the form with the corrected data

Error

Performance Data

Event Data

Fuel data

Re-Submit

Unit*	Year*	Month*	Revision Code	Net Maximum Capacity	Net Dependable Capacity	Net Actual Generation	Load Characteristics	Attempted Starts	Actual Starts	Service Hours	Reserve Hour
1_Dummy1	2025	2	R (Replace)	170.00	153.00	0.00		3	3	456.00	72.00
1_Dummy1	2025	5	D (Delete)								

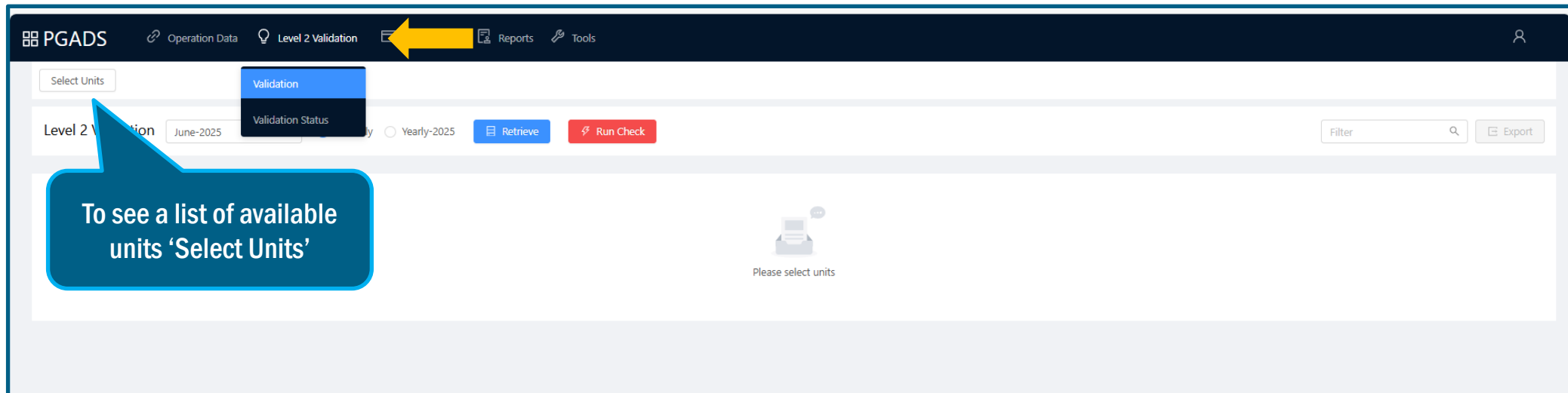
Double Click the box to edit the data

*If a user chooses the option to edit the data online, the user must reflect the exact changes made online in their personal records offline so that both the online and offline records are an exact match

PGADS Portal Options: Level 2 Validation

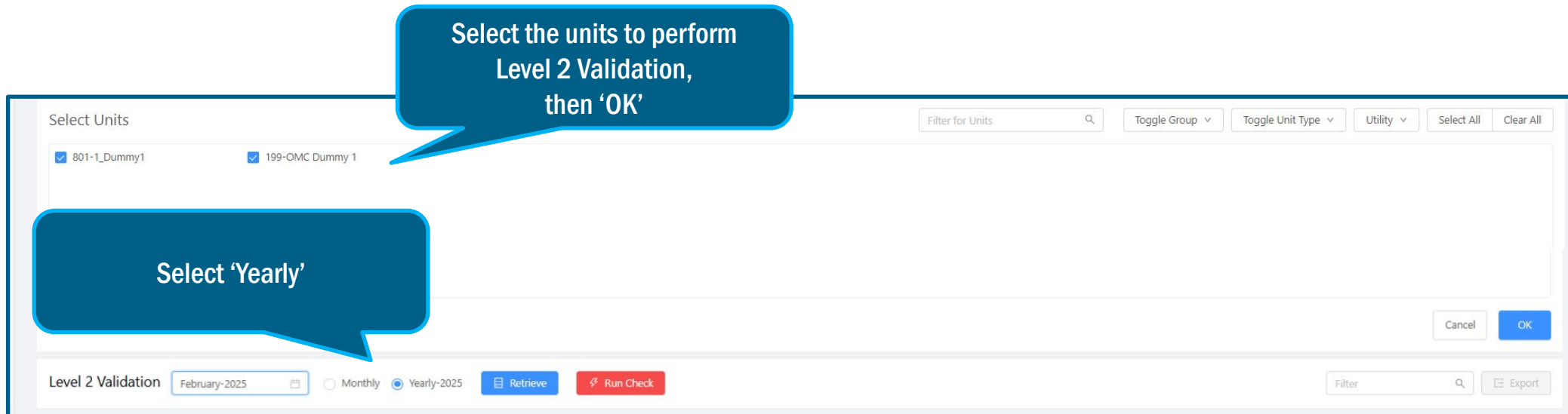
■ Level 2 Validation

- Uploaded data is cross-checked between the event and performance data for accuracy
- All data must be validated by the 20th day of the month for the previous month's data
- Can be performed by unit



PGADS Portal Options: Level 2 Validation

- Level 2 Validation
 - Select the units to perform the Level 2 Validation
 - 'Run Check' to perform the Level 2 Validation



The screenshot shows the 'Select Units' interface for Level 2 Validation. It includes a search bar, filters for units, a list of selected units, and buttons for 'Cancel', 'OK', 'Retrieve', and 'Run Check'. The 'Yearly-2025' frequency is selected.

Select the units to perform Level 2 Validation, then 'OK'

Select 'Yearly'

'Run Check' to perform the Level 2 Validation

PGADS Portal Options: Level 2 Validation

■ Level 2 Validation

- Fatal errors at this level will need correction in the original offline GADS ASCII file
 - Correct the file
 - Repeat the Data Import process

Select 'Show Error Only' to view a list of errors needing attention

Validation	Error	Status				
			<input checked="" type="checkbox"/> Show Error Only			
Utility*▲	Unit*▲	Error Code	Error Message	Modifier	Modified Date	
Dummy Org	1_Dummy1	2001	95-Monthly Performance Record is missing (Card 95).	USER	07/31/2025 11:50:48	
Dummy Org	1_Dummy1	2001	95-Monthly Performance Record is missing (Card 95).	USER	07/31/2025 11:50:48	
Dummy Org	1_Dummy1	2001	95-Monthly Performance Record is missing (Card 95).	USER	07/24/2025 03:41:02	
Not In Use	OMC Dummy 1	2001	95-Monthly Performance Record is missing (Card 95).	USER	07/31/2025 11:50:48	
Not In Use	OMC Dummy 1	2001	95-Monthly Performance Record is missing (Card 95).	USER	07/24/2025 03:41:02	
Not In Use	OMC Dummy 1	2001	95-Monthly Performance Record is missing (Card 95).	USER	07/02/2025 15:23:35	

PGADS Portal Options: Level 2 Validation

- Level 2 Validation
 - Successful Level 2 Validations can be viewed by 'Monthly Operation View'
 - 'Not Validated' requires correction in the original offline GADS ASCII file
 - Only units that do not pass Level 2 Validation have to be re-validated

Validation

Error

Status

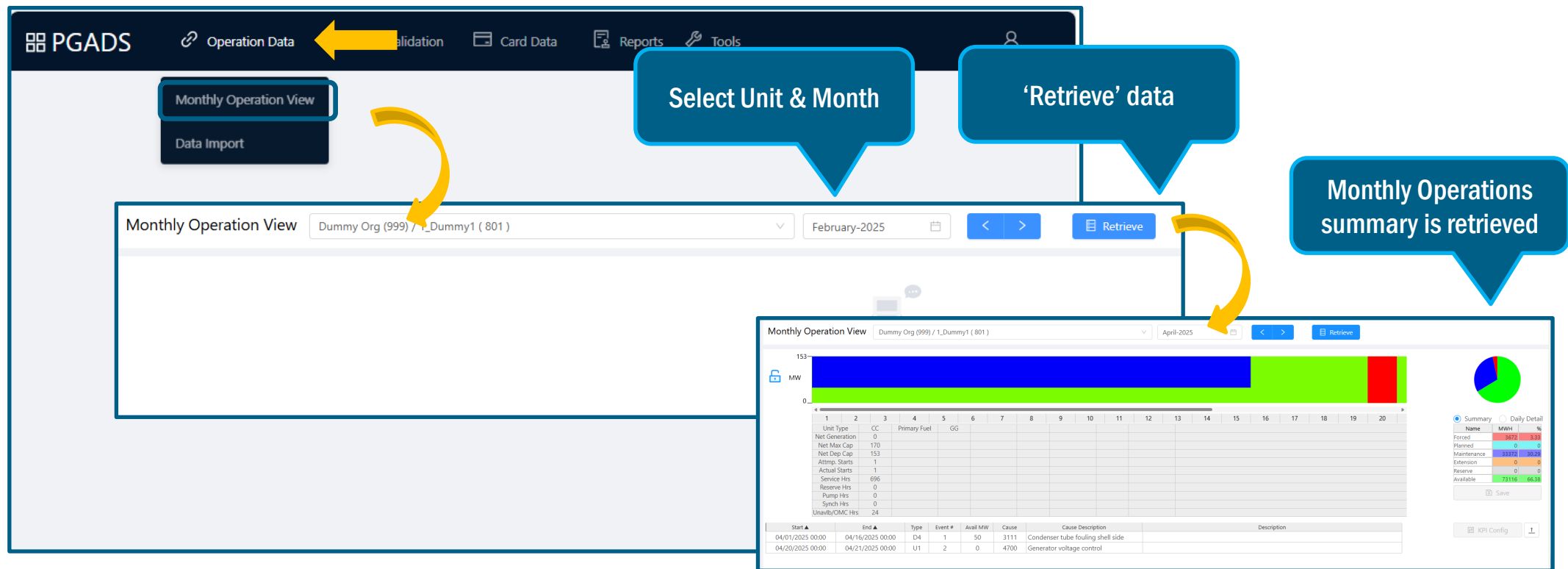
Year*▲	Month*▲	Utility*▲	Unit*▲	Status
2025	1	Dummy Org	1_Dummy1	Not Validated
2025	2	Dummy Org	1_Dummy1	Validated
2025	3	Dummy Org	1_Dummy1	Validated
2025	4	Dummy Org	1_Dummy1	Not Validated
2025	5	Dummy Org	1_Dummy1	Validated
2025	6	Dummy Org	1_Dummy1	Not Validated
2025	7	Dummy Org	1_Dummy1	Not Validated
2025	8	Dummy Org	1_Dummy1	Not Validated
2025	9	Dummy Org	1_Dummy1	Not Validated

Validation status

Status column will display
Validation status

PGADS Portal Options: Operation Data

- **Monthly Operation View**
 - Presents a monthly view of the validated event and performance data for the selected unit(s)



PGADS | Operation Data | Validation | Card Data | Reports | Tools

Monthly Operation View | Data Import

Monthly Operation View | Dummy Org (999) / 1_Dummy1 (801) | February-2025 | < > | Retrieve

Select Unit & Month

'Retrieve' data

Monthly Operations summary is retrieved

Monthly Operation View | Dummy Org (999) / 1_Dummy1 (801) | April-2025 | < > | Retrieve

Summary | Daily Detail

Name	Value	Unit
Forced	3475	3.33
Planned	0	0
Maintenance	33372	30.29
Extension	0	0
Reserve	0	0
Available	73116	66.38

Save

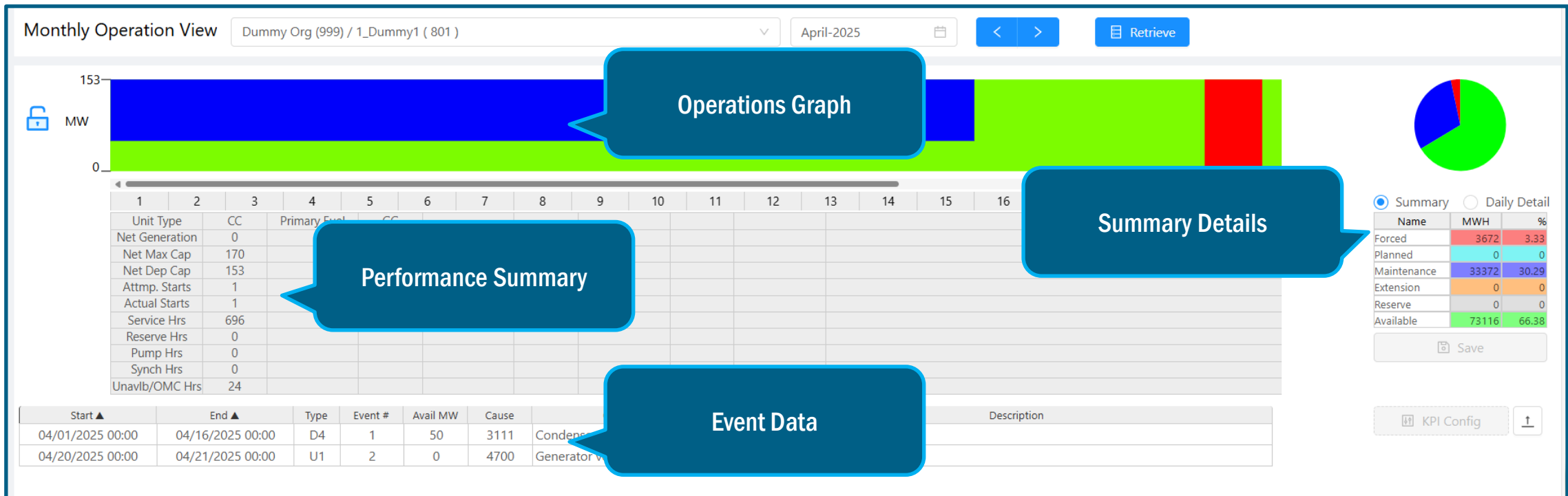
KPI Config | Download

Start	End	Type	Event #	Avail MW	Cause	Cause Description	Description
04/01/2025 00:00	04/16/2025 00:00	D4	1	50	3111	Condenser tube fouling shell side	
04/20/2025 00:00	04/21/2025 00:00	U1	2	0	4700	Generator voltage control	

PGADS Portal Options: Operation Data

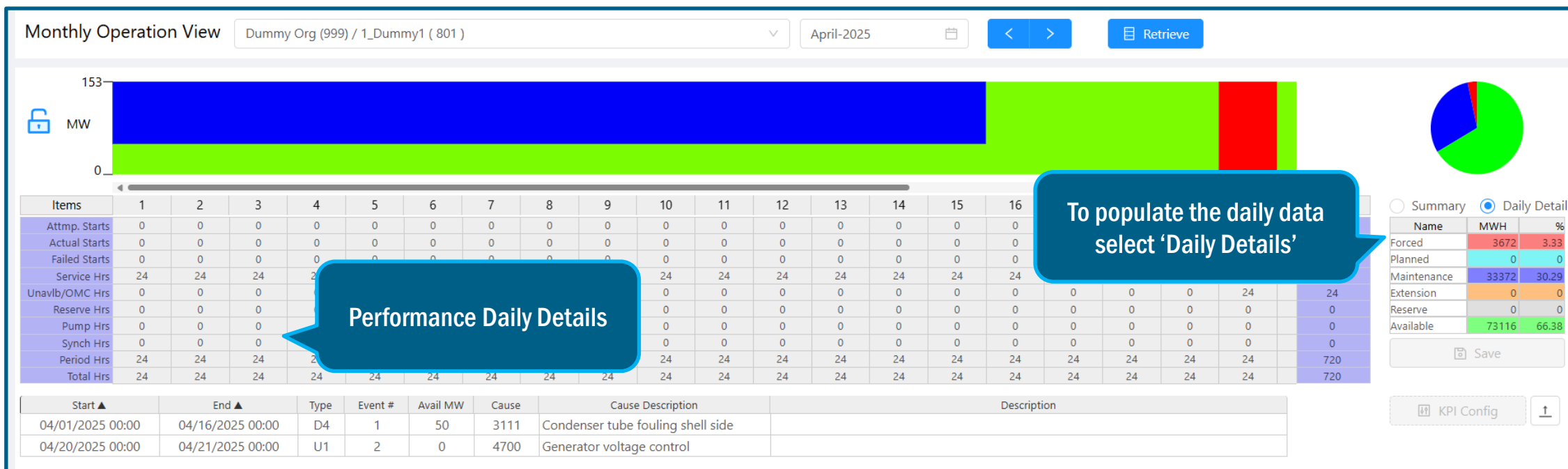
■ Monthly Operation Summary

- There are four sections of data: Operations Graph, Performance Data, Event Data, and Summary/Daily Detail



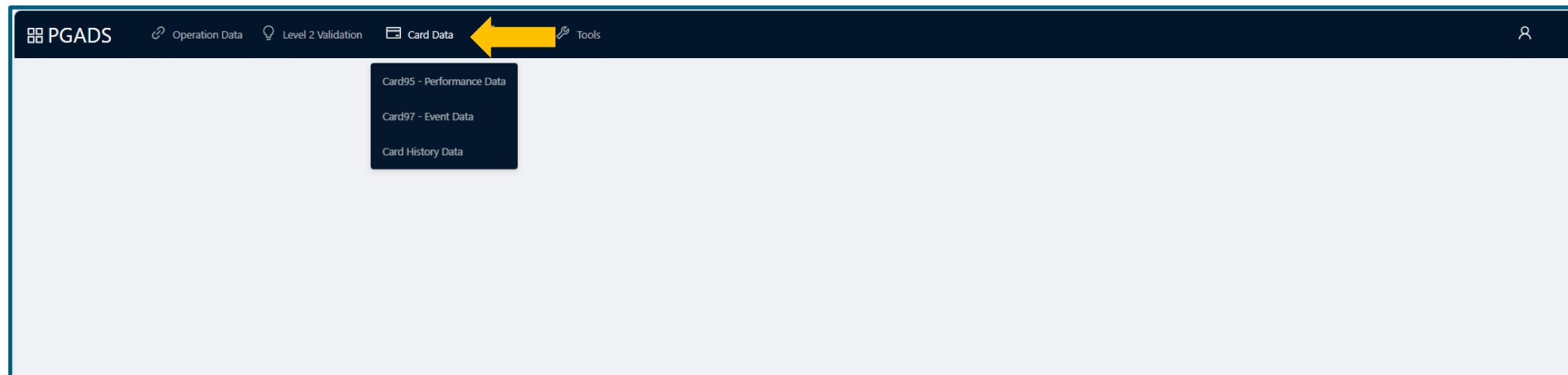
PGADS Portal Options: Operation Data

- Monthly Operation Summary
 - Select the 'Daily Details' to view by day



PGADS Portal Options: Card Data

- Card Data Options
 - Card95 Generation Performance Data
 - A unit's actual generation data for the month
 - Card97 Event Data
 - Each time a unit experiences a change in operating status or capability, that event is recorded
 - Card History Data
 - Full modification history is recorded for card records



PGADS Portal Options: Card Data

Retrieving Card Data

Select the units

Select the timeframe

Option to 'Export'

Select Units

1_Dummy1 x

OMC Dummy 1 x

Performance Data

January-2025 ~ June-2025

Retrieve

Filter

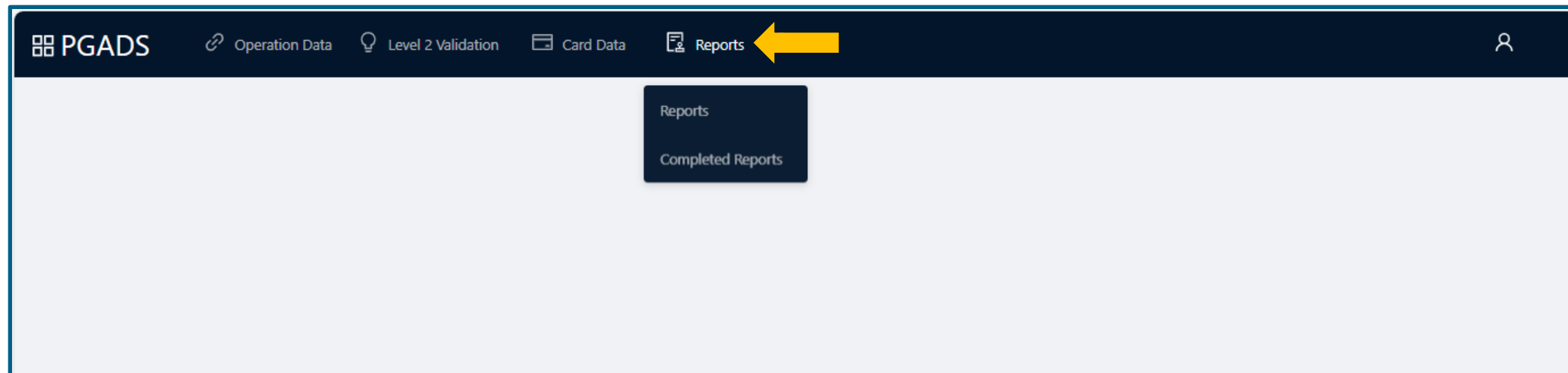
Export

Unit*▲	Year*▲	Month*▲	Utility▲	Gross Maximum Capacity	Gross Dependable Capacity	Gross Actual Generation	Net Maximum Capacity	Net Dependable Capacity	Net Actual Generation	Load Characteristics	Attempted Starts	Actual Starts	Load Descripti
1_Dummy1	2025	1	Dummy Org	0.00	0.00		170.00	153.00	0.00		3	3	
1_Dummy1	2025	2	Dummy Org	0.00	0.00		170.00	153.00	0.00		3	3	
1_Dummy1	2025	3	Dummy Org	0.00	0.00		170.00	153.00	0.00		1	1	
1_Dummy1	2025	4	Dummy Org	0.00	0.00		170.00	153.00	0.00		1	1	
OMC Dummy 1	2025	1	Not In Use	0.00	0.00		170.00	153.00	0.00		3	3	
OMC Dummy 1	2025	2	Not In Use	0.00	0.00		170.00	153.00	0.00		3	3	
OMC Dummy 1	2025	3	Not In Use	0.00	0.00		170.00	153.00	0.00		1	1	
OMC Dummy 1	2025	4	Not In Use	0.00	0.00		170.00	153.00	0.00		1	1	
OMC Dummy 1	2025	5	Not In Use	0.00	0.00		170.00	153.00	10.00		0	0	

Select 'Retrieve'

PGADS Portal Options: Reports

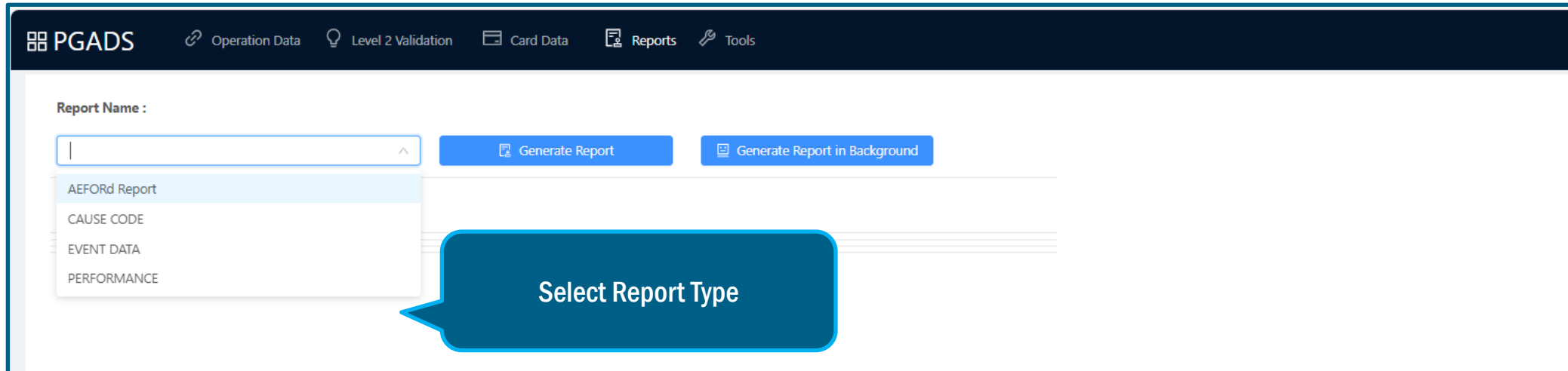
- Reports
 - Reports
 - Allows the user to run and download reports
 - Completed Reports
 - Allows the user to retrieve reports that have run in the background



PGADS Portal Options: Reports

■ Report Types

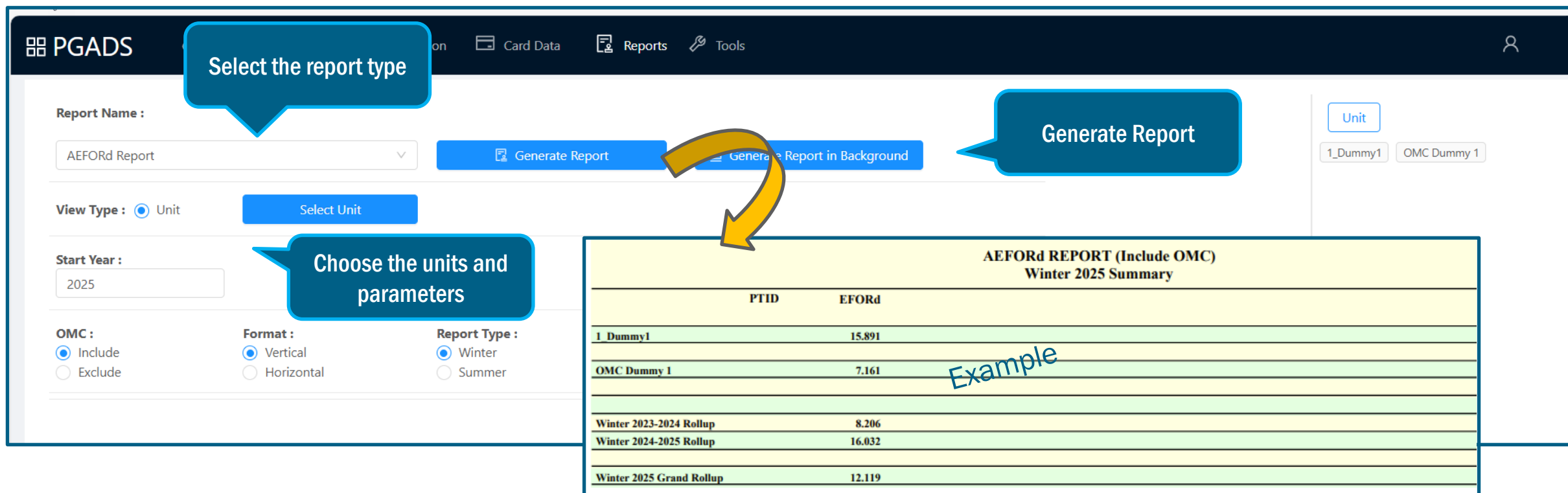
- ***AEFORd*** report generates AEFORd metrics that will be used in the Installed Capacity market
- ***Cause Code*** report generates a summary of events grouped by cause for unit(s) selected
- ***Event Data*** report generates a summary of events by type using Card97 data
- ***Performance Data*** report generates a listing of data submitted through Card95



The screenshot shows the PGADS portal interface. At the top is a dark blue navigation bar with the PGADS logo and links for Operation Data, Level 2 Validation, Card Data, Reports, and Tools. Below this is a white content area. On the left, there is a 'Report Name' dropdown menu with a search icon and a list of report types: AEFORd Report, CAUSE CODE, EVENT DATA, and PERFORMANCE. To the right of the dropdown are two blue buttons: 'Generate Report' and 'Generate Report in Background'. A blue callout bubble with the text 'Select Report Type' points to the dropdown menu.

PGADS Portal Options: Reports

■ Example Report Generation



The screenshot shows the PGADS portal interface with the following elements:

- Header:** PGADS logo and navigation links: on, Card Data, Reports, Tools.
- Report Name:** A dropdown menu set to "AEFORd Report".
- Buttons:** "Generate Report" and "Generate Report in Background".
- View Type:** Radio buttons for "Unit" (selected) and "Card".
- Start Year:** A text input field containing "2025".
- OMC:** Radio buttons for "Include" (selected) and "Exclude".
- Format:** Radio buttons for "Vertical" (selected) and "Horizontal".
- Report Type:** Radio buttons for "Winter" (selected) and "Summer".
- Unit Selection:** A "Select Unit" button and a list of units: "1_Dummy1" and "OMC Dummy 1".
- Example Report Output:** A table titled "AEFORd REPORT (Include OMC) Winter 2025 Summary".

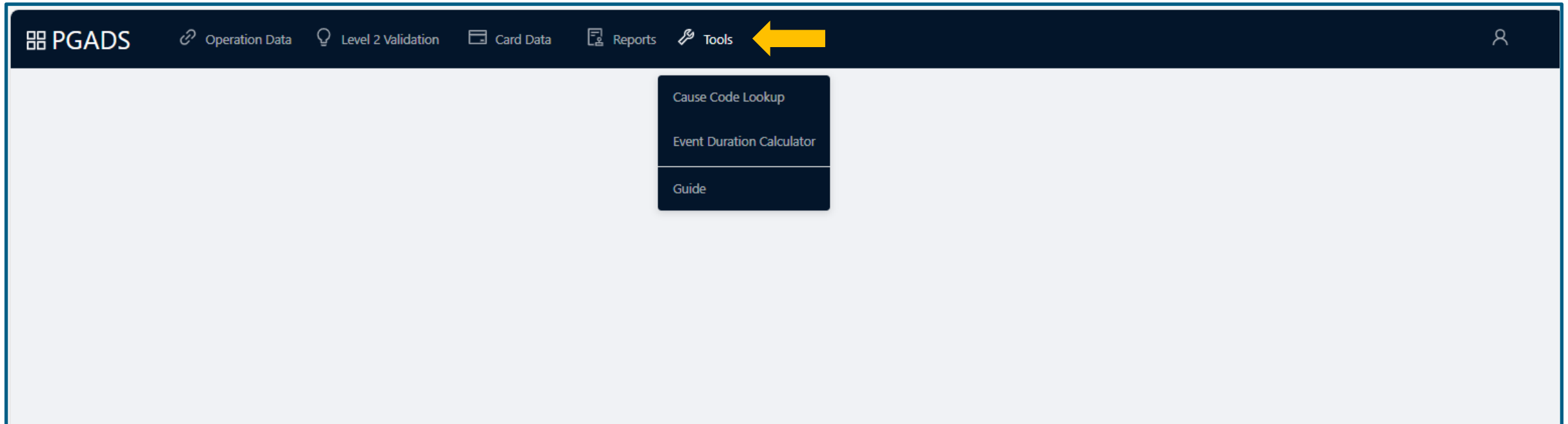
Example Report Table:

PTID	EFORd
1_Dummy1	15.891
OMC Dummy 1	7.161
Winter 2023-2024 Rollup	8.206
Winter 2024-2025 Rollup	16.032
Winter 2025 Grand Rollup	12.119

Example

PGADS Portal Options: Tools

- Available Tools
 - Cause Code Lookup
 - Event Duration Calculator
 - Guide

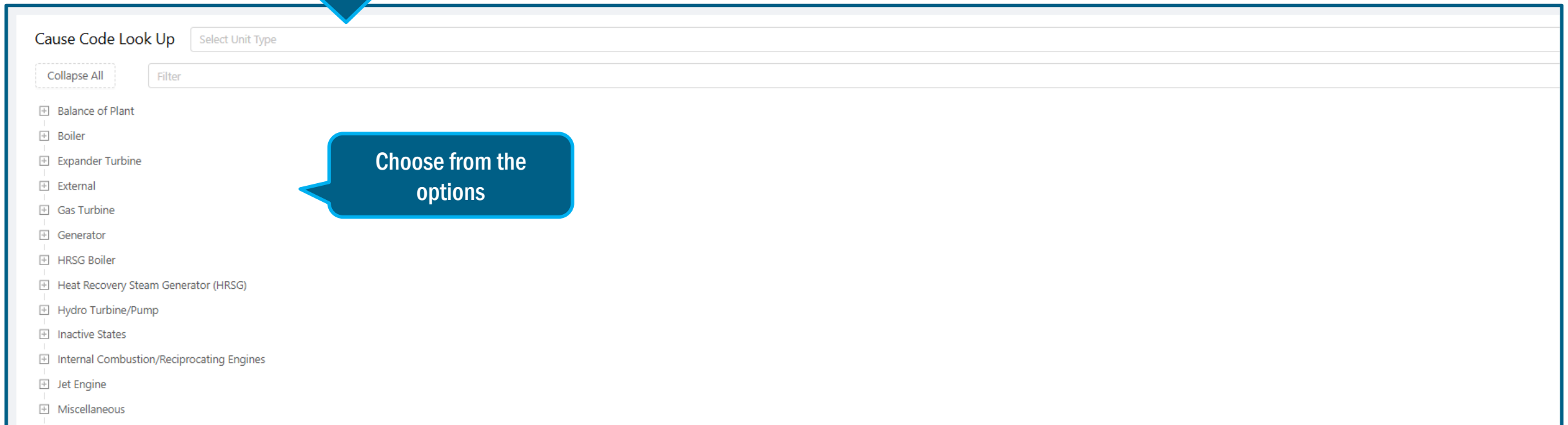


PGADS Portal Options: Tools

- Cause Code Lookup
 - Provides the ability to search for event cause codes and descriptions

Select the unit type

Choose from the options



The screenshot displays the 'Cause Code Look Up' interface. At the top, there is a header bar with the title 'Cause Code Look Up' and a dropdown menu labeled 'Select Unit Type'. Below the header, there is a 'Collapse All' button and a 'Filter' input field. A list of unit types is shown on the left side, each with a plus icon in a box: Balance of Plant, Boiler, Expander Turbine, External, Gas Turbine, Generator, HRSG Boiler, Heat Recovery Steam Generator (HRSG), Hydro Turbine/Pump, Inactive States, Internal Combustion/Reciprocating Engines, Jet Engine, and Miscellaneous. A blue callout bubble points to the 'Select Unit Type' dropdown, and another blue callout bubble points to the list of unit types.


PGADS Portal Options: Tools

- **Event Duration Calculator**
 - Provides the ability to calculate the duration of an event in hours

Select the event
start and end times

Duration will
automatically calculate

Event Duration Calculator

Event Start : 07/31/2025 23:31 

Event End : 08/01/2025 23:31 

☐ DaylightSavings

Duration in Hours : 24.00

PGADS Portal Options: Tools

- **Guide**
 - Provides access to the PowerGADS User's Guide

Guide

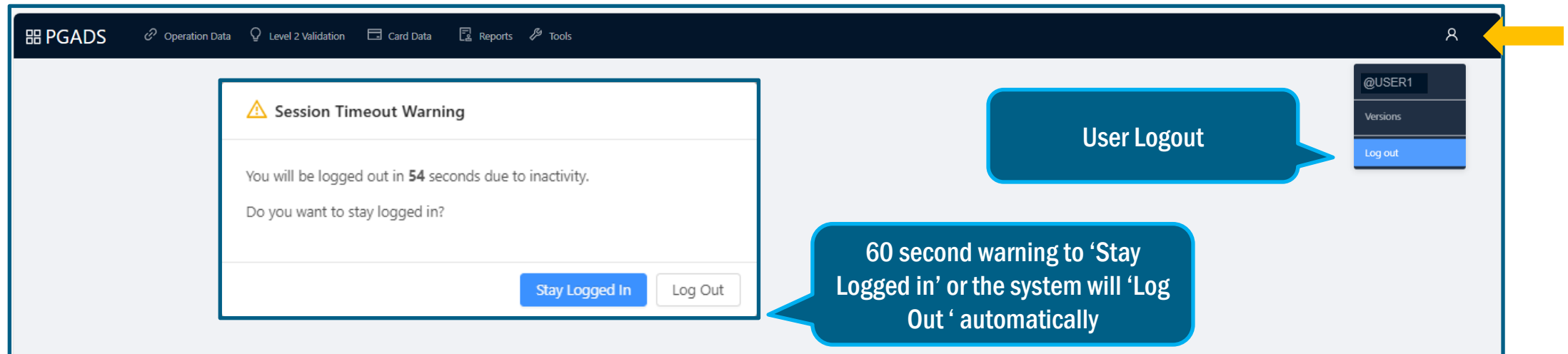
1. [PowerGADS 4.0 User Manual](#)
2. [PowerGADS 4.0 Quick Process Guide](#)

User Manual or Quick
Process Guide available

PGADS Portal Options: Account

■ Person Icon

- Displays the name of the user currently logged in
 - Before closing the browser, the user should log out of the PGADS portal
- NOTE:** If an idle session lasts longer than 15 minutes, the user will be logged out



Summary of Process

1. Uploaded file will prompt an automatic Level 1 Validation
2. User must select units and 'Run Check' for Level 2 Validation
3. User must correct errors in the user's offline GADS ASCII file and resubmit file or make changes in the PGADS portal directly
4. User must select 'Re-submit' each time a correction is made in the PGADS Portal to save the change
5. User must validate the GADS Data pertaining to the previous month, no later than the 20th day of each month
6. User can confirm accurate reporting through the 'Monthly Operation View'

Note: All on-line corrections or edits to GADS Data should also be reflected in the User's GADS offline database, so the change is retained for the next upload

Important Items to Consider

- ✓ Session times out after 15 minutes due to inactivity
- ✓ Select 'Re-submit' frequently because, if the session times out prior to selecting the "re-submit" button, all data entered in that session will be lost
- ✓ Submit only Year-to-Date data
- ✓ All online PGADS corrections or edits should also be reflected in the User's offline GADS ADCII database

Additional Resources

- **Tariff:**
 - Market Administration and Control Area Services Tariff
- **Manuals:**
 - Installed Capacity Manual
 - Installed Capacity Manual, Attachment J and K
- **User's Guides:**
 - PowerGADS User's Guide
 - Market Participants User's Guide
- **Market Training materials:**
 - GADS Training E-learning suite
 - GADS Frequently Asked Questions
 - NAESB Digital Certificate e-learning module

**For any future assistance:
Please contact NYISO Stakeholder Services at
stakeholder_services@nyiso.com or by phone at (518)
356-6060**