Capacity Exchange User Guide

February 13, 2024

Version 9.0

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Disclaimer -

The PJM *Capacity Exchange User Guide* is intended to provide Market Participants and other interested parties with introductory information about the PJM Reliability Pricing Model. The User Guide is an instructional tool and is not intended to be a complete source of information about PJM's bidding and administrative processes. The PJM ISO provides no warranties of any kind with respect to the correctness of completeness of the information set forth in this Users Guide, and, therefore, bears no responsibility for any damages resulting from a Market Participant's reliance on any error or omission in this guide. The *PJM Capacity Exchange User Guide* is not designed, nor is it intended to provide advice or guidance with respect to strategies for bidding into the PJM Reliability Pricing Model's Auctions.

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Revision History –

- Revision 0 (11/15/2018) - User guide created for the PJM Tool, Capacity Exchange, which replaced the eRPM system.
- Revision 1 (6/1/2020) - User guide modified to include functionality for Non-Retail Behind the Meter Generation (NRBTMG).
- Revision 2 (11/12/2020) – User guide modified to include updates for the production release of new Non-Retail Behind the Meter Generation (NRBTMG) screens.
- Revision 3 (5/10/2021) – User guide modified to include functionality for the 2019 MOPR Order.
- Revision 4 (8/4/2021) – User guide modified to include functionality for ELCC screens.
- Revision 5 (9/30/2021) – User Guide modified to include functionality for Conditioned State Support and Buyer Side Market Power certifications.
- Revision 6 (12/9/2021) – User Guide modified to include enhanced guidance on submitting scheduled Non-Retail Behind the Meter Generation (NRBTMG) outages.
- Revision 7 (4/15/2022) – User Guide modified to include display change for Resource Position, Pre-Registration Confirmation, Demand Resource and Energy Resource Setup, and Resource Offers for 2023/2024 and further delivery years.
- Revision 8 (5/2/2022) – Buttons with underlying menu (e.g. Create Transaction, Create FRR Transaction and NRBTMG Create Change Request buttons) must be right clicked to activate. Left mouse click (or double click) will no longer work.
- Revision 9 (2/13/2024) – User Guide modified to include display change for Generation Resource Position Details and UCAP Factors (Formerly EFOR Values).

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Introduction

The *PJM Capacity Exchange Users Guide* provides Market Participants with the information needed to use the PJM Capacity Exchange system to participate in PJM's Capacity Market. The User Guide describes the Capacity Exchange system and the tasks that Market Participants can perform, as well as the expected system responses.

What is the Purpose of PJM Capacity Market?

The purpose of the PJM Capacity Market is to ensure the adequate availability of capacity resources that can be called upon to ensure the reliability of the power grid. The Capacity Market structure consists of the Reliability Pricing Model (RPM) and the Fixed Resource Requirement (FRR) Alternative. The market is designed to provide transparent information and to enable forward capacity market signals to support infrastructure investment. The PJM Capacity Market design provides a forward mechanism to evaluate the ongoing reliability requirements in a transparent way to provide opportunity for generation, demand response, energy efficiency, price responsive demand, and transmission solutions.

What is the Reliability Pricing Model?

RPM includes a Base Residual Auction that is held during the month of May three (3) years prior to the start of the Delivery Year, three scheduled Incremental Auctions, and a Conditional Incremental Auction, if needed. RPM also includes a bilateral market that is facilitated through the Capacity Exchange system.

The Base Residual Auction (BRA) allows for the procurement of resource commitments to satisfy the region's unforced capacity obligation and allocates the cost of those commitments among the Load Serving Entities (LSEs) through a Locational Reliability Charge.

Incremental Auctions allow for an incremental procurement/release of resource commitments to satisfy an increase/decrease in the region's unforced capacity obligation due to a load forecast increase/decrease or a decrease in the amount of committed resources due to a resource cancellation, delay, derating, EFORd increase, or decrease in the nominated value of a planned Demand Resource or Energy Efficiency Resource. The cost impact of the procurement/release of commitments is allocated to LSEs through a Locational Reliability Charge in the case of an increase/decrease in the region's unforced capacity obligation or to resource providers that procured replacement capacity in the auction.

A Conditional Incremental Auction may be conducted at any time prior to the Delivery Year if a Backbone transmission line is delayed and results in the need for PJM to procure additional capacity in a Locational Deliverability Area to address the corresponding reliability problem. The cost of the additional capacity procurement is allocated to LSEs through the Locational Reliability Charge.

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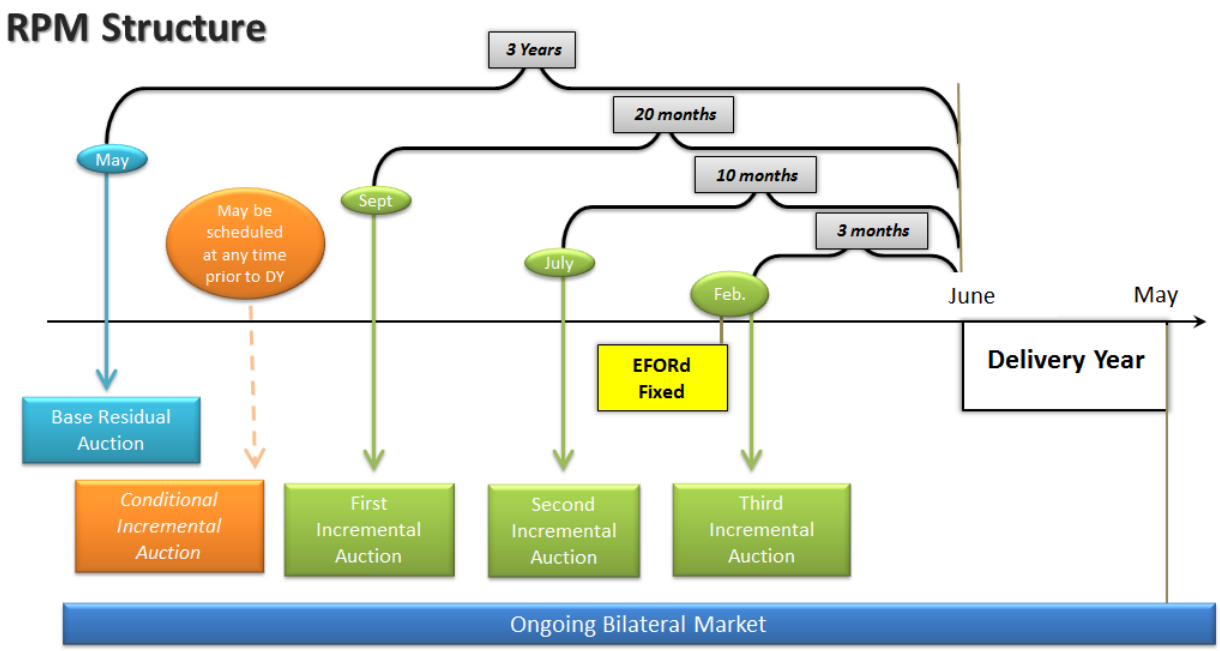
The bilateral market provides LSEs the opportunity to hedge against the Locational Reliability Charge determined through the conducted Auctions for a particular Delivery Year. The bilateral market also provides resource providers an opportunity to cover any auction commitment shortages.

Timing of the RPM Auctions



What is Fixed Resource Requirement Alternative?

The PJM Capacity Market contains an alternative method of participation, known as the Fixed Resource Requirement (FRR) Alternative. The FRR Alternative provides a Load Serving Entity with the option to submit a FRR Capacity Plan and meet a fixed capacity resource requirement as an alternative to the requirement to participate in the PJM Reliability Pricing Model (RPM), which includes a variable capacity resource requirement.

Typical Uses of Capacity Exchange

Market Participants can use the Capacity Exchange system to:

- View Load and Obligation data
- View/Manage Company's resource position summary and resource details

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- Participate in PJM RPM Auctions
- View/Manage Capacity Transactions
- Participate in Fixed Resource Requirement (FRR) Alternative
- View Performance-related deficiencies/shortfalls

Interfacing with Capacity Exchange

Market Participants have two primary methods of interacting with the PJM Capacity Exchange. The methods are:

Web-based Interactions: Access is provided through a series of worldwide, web-based interactive displays, which are accessible via the Internet. Further sections of this Users Guide describe the displays.

XML-formatted File Exchange: Files are uploaded or downloaded using the Market User Interface (MUI) or through a browserless application. The Capacity Exchange XML Schema is posted on the Capacity Exchange section of the eTools page on PJM.com.

Knowledge Assumptions

The *PJM Capacity Exchange Users Guide* is written under the assumption that you:

- Understand PJM's Reliability Pricing Model market rules
- Understand PJM's Fixed Resource Requirement alternative market rules

If you would like additional information about any of these topics, consider referencing the following information sources:

- Open Assess Transmission Tariff
- Reliability Assurance Agreement
- PJM Manuals, including Manual 18, PJM Capacity Market and M18B, Energy Efficiency Measurement & Verification
- PJM Training Courses & Material
- PJM's Internet site (www.pjm.com)

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PJM Capacity Exchange Overview

Overview

PJM Capacity Exchange is designed to make it easy for you to participate in PJM's Reliability Pricing Model or Fixed Resource Requirement Alternative. Market Participants use PJM's Capacity Exchange to submit capacity offers for generation, demand resources, energy efficiency resources, and transmission upgrades in the RPM Auctions, submit bids to purchase replacement capacity in Incremental Auctions, review their resulting resource position, create bilateral transactions, view delivery year performance-related deficiency/shortfalls for committed resources, and view load obligations if participant is a Load Serving Entity. FRR Entities use PJM's Capacity Exchange system to commit capacity resources to their FRR Capacity Plan.

PJM Capacity Exchange Web Site

Market Participants interface with PJM Capacity Exchange via the Market User Interface (MUI). The PJM Capacity Exchange application is integrated into PJM Tool environment which allows the user to access various PJM web based applications via a single username and password. The PJM Tool environment is accessed via internet facilities, using any of the following web browsers:

- Microsoft Internet Explorer Version 9 & forward
- Current version of Chrome
- Current version of Firefox
- Current version of Safari

Capacity Exchange User Qualification

To access Capacity Exchange, Market Participants must have a valid user account established in the Account Manager tool. Prior to accessing Capacity Exchange, you must be a "qualified' Capacity Exchange user. There are two types of Capacity Exchange qualifications for registered users:

- Read Only
- Read/Write

You must identify the type of user you want to be at the time you register to become a Capacity Exchange user in Account Manager.

These qualifications can be set by an individual company's **Company Account Manager (CAM).**

Capacity Exchange is Single User Multiple Account (SUMA) enabled. SUMA provides the ability to link multiple accounts to a single primary user account. Please see the SUMA Quick Start Guide for further details on how to create a SUMA primary account. https://www.pjm.com/-/media/etools/account-manager/single-user-multi-account-quick-start-guide.ashx?la=en

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Accessing PJM Capacity Exchange Application

- Enter the following URL for Capacity Exchange in the address bar:

  https://capacityexchange.pjm.com/capacityexchange/pages/secure/

- Enter your Username and Password. You must be a qualified user of Capacity Exchange.

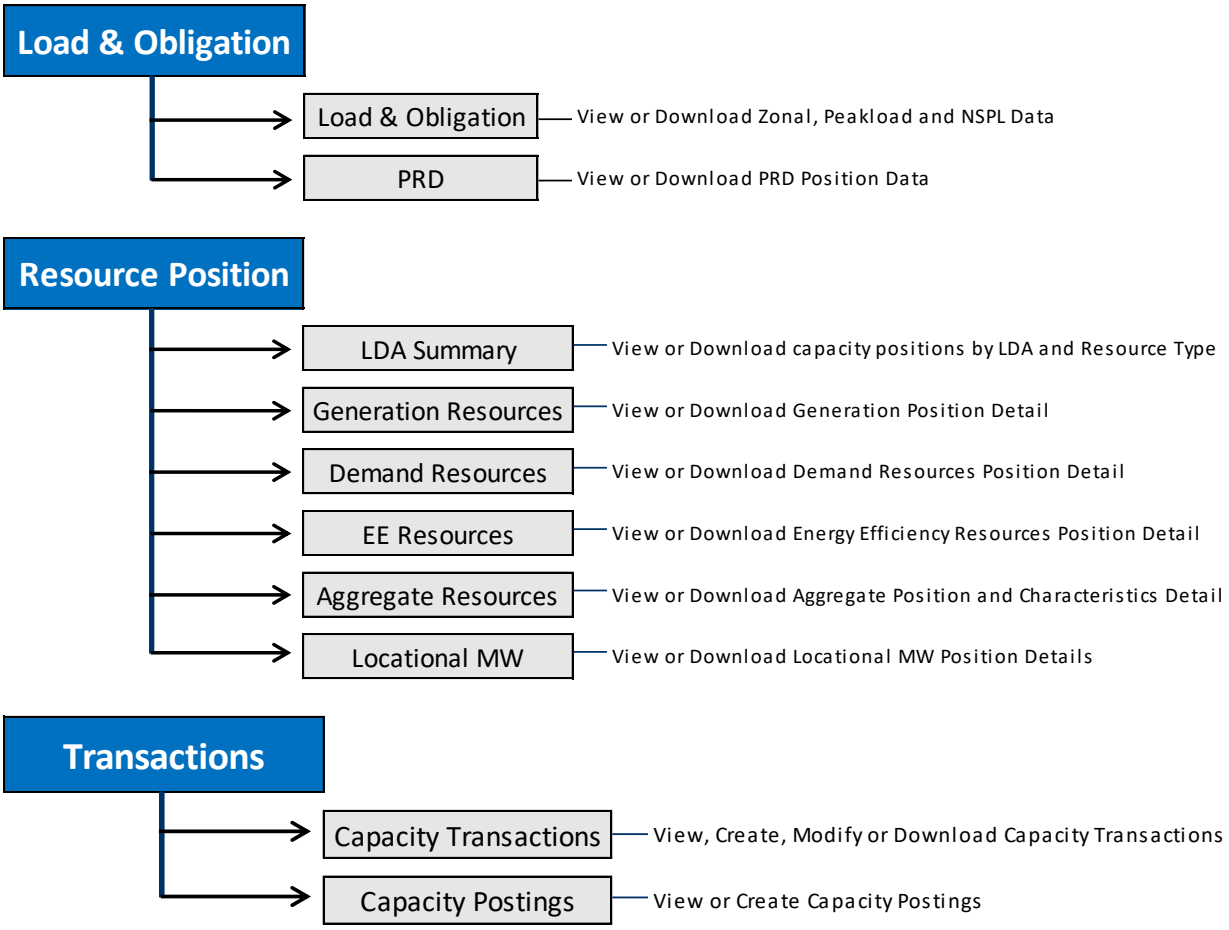
In addition to the production environment, a train environment is available for participants to test performing tasks in Capacity Exchange. User accounts need to be separately requested for the train environment.

Train URL: https://capacityexchangetrain.pjm.com/capacityexchange/pages/secure

PJM Capacity Exchange Navigation

Capacity Exchange is organized into sections featuring primary and secondary level menus on the left side navigation bar.

The following diagram provides an overview of the Capacity Exchange menu options, along with tasks that can be completed in each section.



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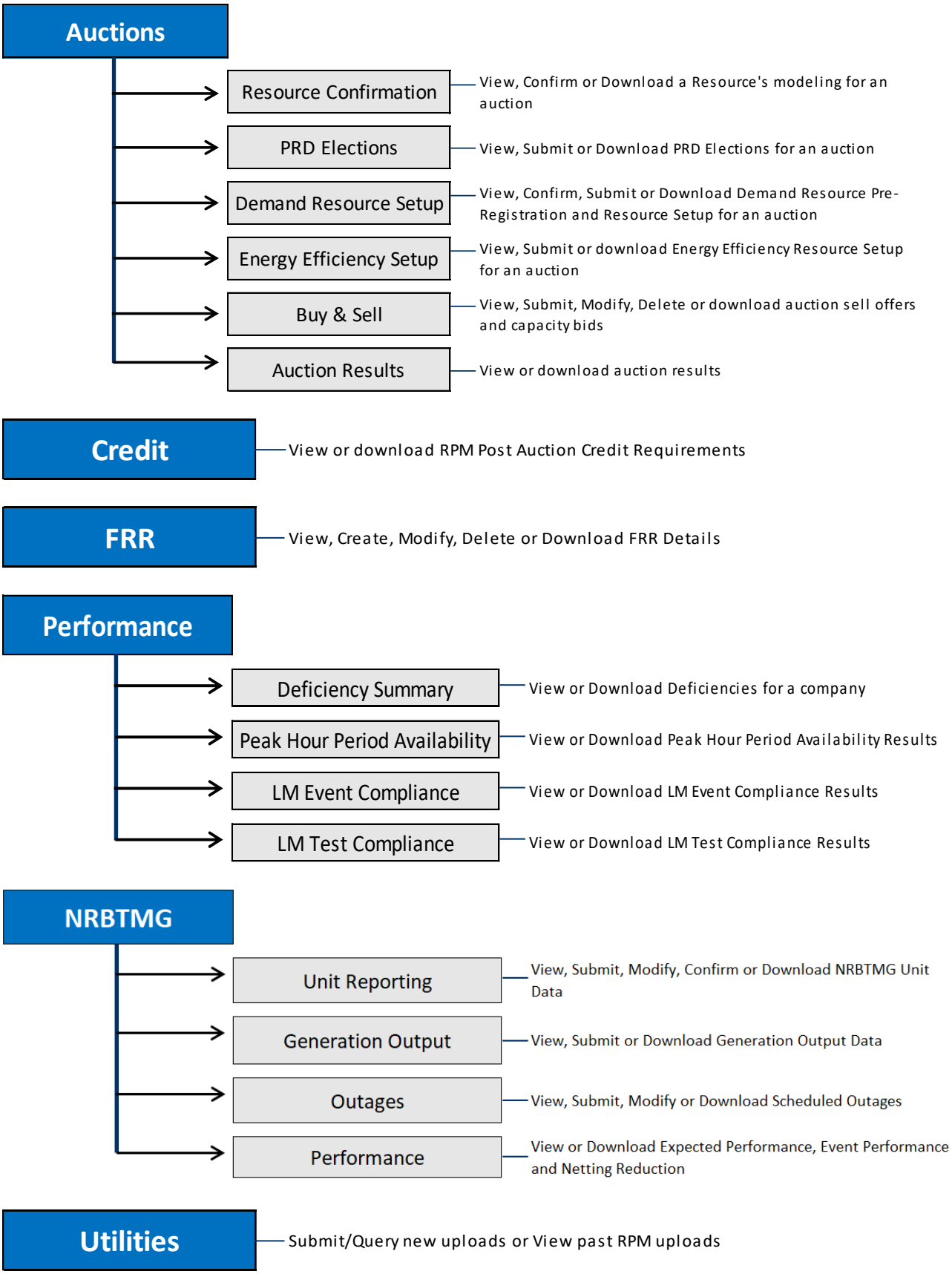
Auctions
Resource Confirmation
View, Confirm or Download a Resource's modeling for an auction
PRD Elections
View, Submit or Download PRD Elections for an auction
Demand Resource Setup
View, Confirm, Submit or Download Demand Resource Pre-Registration and Resource Setup for an auction
Energy Efficiency Setup
View, Submit or download Energy Efficiency Resource Setup for an auction
Buy & Sell
View, Submit, Modify, Delete or download auction sell offers and capacity bids
Auction Results
View or download auction results
Credit
View or download RPM Post Auction Credit Requirements
FRR
View, Create, Modify, Delete or Download FRR Details
Performance
Deficiency Summary
View or Download Deficiencies for a company
Peak Hour Period Availability
View or Download Peak Hour Period Availability Results
LM Event Compliance
View or Download LM Event Compliance Results
LM Test Compliance
View or Download LM Test Compliance Results
NRBTMG
Unit Reporting
View, Submit, Modify, Confirm or Download NRBTMG Unit Data
Generation Output
View, Submit or Download Generation Output Data
Outages
View, Submit, Modify or Download Scheduled Outages
Performance
View or Download Expected Performance, Event Performance and Netting Reduction
Utilities
Submit/Query new uploads or View past RPM uploads

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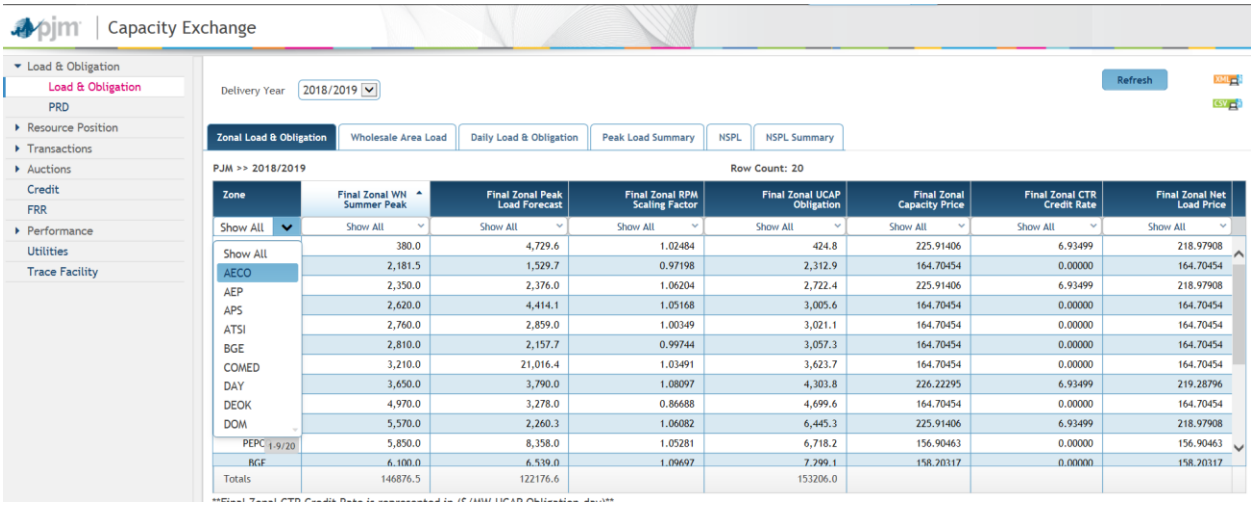
PJM Capacity Exchange Column Sort and Filter Features

Data is displayed in a table format on a Capacity Exchange screen. The data in a column may be sorted in ascending or descending order or filtered.

A user may sort the data in a column in ascending or descending order by clicking on the column header. An upward arrow to the right of the column header indicates the data in the column is being sorted in ascending order. A downward arrow to the right of the column header indicates the data is being sorted in descending order. A user can toggle between sorting in ascending or descending order by clicking on the column header.

A column filter field is located immediately below a column header and is used to filter the data displayed in a specific column. The column filter field is a drop down list box that will default to "Show All". Upon clicking the drop down arrow to the right of "Show All" in the column filter field for a selected column, a list of available filter options for the selected column will appear. To move through the available filter options for the selected column, the user clicks on the light gray downward or upward arrow that appears within the filter box. Alternatively, a user can type the desired filter option directly in the column filter field. Once a user selects or types the desired filter option, the data on the table will refresh and the data displayed will correspond to the filter option selected for the column.



Capacity Type in PJM Capacity Exchange

On various screens throughout the Capacity Exchange system, the MW data is available to be displayed in a table in Installed Capacity terms or Unforced Capacity terms. If Capacity Type is a separate filter towards the top of the screen, a user can select ICAP to display the MW data in Installed Capacity terms or UCAP to display the data in Unforced Capacity terms.

Buttons in PJM Capacity Exchange

The following buttons appear in Capacity Exchange:

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Refresh: The Refresh button appears on every screen and allows a user to refresh the data that appears on the screen.

Create Transaction: The Create Transaction button allows a user to create a specific type of transaction. This button is viewable on the various resource position detail screens and the Capacity Transactions secondary level menu, this button need to be right clicked to see the specific type of transaction.

Create Posting: The Create Posting button allows a user to create a capacity posting. This button is viewable in the Capacity Posting secondary level menu.

Create FRR Transaction: The Create FRR Transaction allows a user to commit a resource to a FRR Capacity Plan. This button is viewable on the FRR Resource Commitments tab.

Save: The Save button appears when a user is able to submit data on a screen.

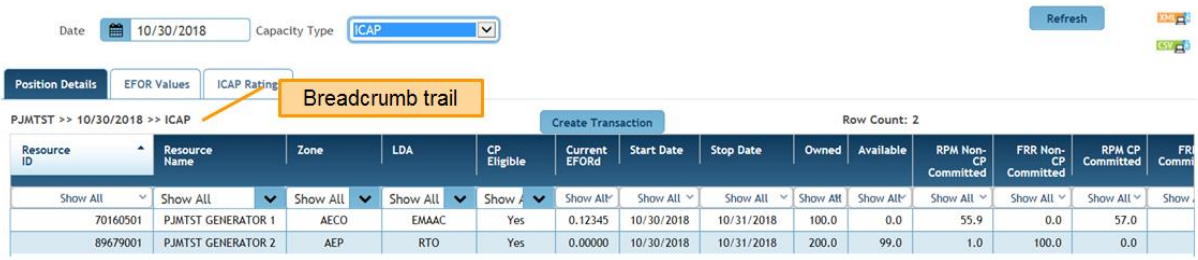
Close: The Close button allows a user to close a pop-up screen.

XML: The XML button allows a user to download the unfiltered data displayed in the table in XML format. On some screens, the XML button allows a user to request data for date ranges beyond what is displayed on the screen.

CSV: The CSV button allows a user to download the unfiltered data displayed in the table in CSV format. On some screens, the CSV button allows a user to request data for date ranges beyond what is displayed on the screen.

Breadcrumb Trail in PJM Capacity Exchange

Throughout Capacity Exchange, a breadcrumb trail (e.g., company short name, delivery year/delivery day, ICAP/UCAP) appears at the top of a table to indicate the applicability of the displayed data.



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Load and Obligation

Load & Obligation Overview

There are two secondary level menus that can be selected from the Load & Obligation primary level navigation menu:

Load & Obligation: The Load & Obligation secondary level menu consists of the following tabs:

- **Zonal Load & Obligation**: Data relevant to zonal unforced capacity obligation and zonal prices applicable to Load Serving Entities are displayed on the **Zonal Load & Obligation** tab.
- **Wholesale Area Load:** The allocations of zonal weather normalized summer peak to wholesale areas in a zone are displayed on the **Wholesale Area Load** tab.
- **Daily Load & Obligation:** An LSE's daily obligation peak load and daily unforced capacity obligation data are displayed on the **Daily Load & Obligation** tab.
- **Peak Load Summary:** An LSE's peak load uploaded by the Electric Distribution Company, daily obligation peak load scaling factor, and resulting obligation peak load data in a zone/area are displayed on the **Peak Load Summary** tab.
- **NSPL:** An LSE's daily Network Service Peak Load (NSPL) data are displayed on the **NSPL** tab.
- **NSPL Summary:** An LSE's network service peak load uploaded by the Electric Distribution Company, daily network service peak load scaling factor, and resulting NSPL data in zone/area are displayed on the **NSPL Summary** tab**.**

PRD: A PRD Provider's price responsive demand position data are displayed on the secondary level menu **PRD**.

Task 1: View Zonal Load and Obligation Data

Data relevant to zonal unforced capacity obligation and zonal prices applicable to Load Serving Entities are displayed on the **Zonal Load & Obligation** tab for a selected Delivery Year. The values will be populated as the Delivery Year gets closer and the final Incremental Auction has been completed. To view Zonal Load and Obligation data, follow the steps below:

Select Load & Obligation → Load & Obligation

Select **Zonal Load & Obligation** tab.

Select the desired Delivery Year from the **Delivery Year** drop down list.

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For the Delivery Year selected, the following data columns will be displayed and can be further filtered:

Zone: A transmission zone within the PJM Region. A zone may include any Non-Zone Network Load located outside the PJM Region that is served from capacity resources located inside a particular zone.

Final Zonal WN Summer Peak: The Zonal Weather Normalized (WN) Summer Peak value for one year prior to the Delivery Year.

Final Zonal Peak Load Forecast: The Final Zonal Peak Load Forecast for the Delivery Year that was used in the development of the Planning Parameters for the final Incremental Auction for such Delivery Year.

Final Zonal RPM Scaling Factor: The Final Zonal RPM Scaling Factor determined for each zone and calculated as the Final Zonal UCAP Obligation divided by the (Forecast Pool Requirement * Final Zonal WN Summer Peak). Final Zonal RPM Scaling Factors are used in determining an LSE's Daily UCAP Obligation and are posted with the final Incremental Auction results.

Final Zonal UCAP Obligation: The Final Zonal UCAP Obligation that is determined after the clearing of the final Incremental Auction for the Delivery Year. The Final Zonal UCAP Obligation is equal to the zonal allocation of the Final RTO UCAP Obligation. The Final RTO UCAP Obligation is posted on pjm website with the final Incremental Auction results and represents the RTO unforced capacity obligations satisfied through all RPM Auctions for the Delivery Year. The Final RTO UCAP Obligation is allocated to the zones on a pro-rata basis based on the Final Zonal Peak Load Forecasts.

Final Zonal Capacity Price: The Final Zonal Capacity Prices is the ($/MW-day) applied to an LSE's daily UCAP obligation in a Zone (for an LSE that has not elected the FRR Alternative) for use in assessing Locational Reliability Charges the LSE is obligated to pay for a Delivery Year.

Final Zonal CTR Credit Rate: The Final Zonal CTR Credit Rate is the final rate ($/MW-day) applied to an LSE's daily UCAP obligation in a zone (for an LSE that has not elected the FRR Alternative) for use in determining CTR Credits the LSE receives for the given Delivery Year.

Final Zonal Net Load Price: Final Zonal Net Load Price ($/MW-day) equals the Final Zonal Capacity Price minus the Final Zonal CTR Credit Rate in a zone and represents that net load price in a zone for a LSE that has not elected the FRR Alternative.

Task 2: Update Wholesale Area Load Allocation Data

The purpose of the Wholesale Area Load tab is for an Electric Distribution Company (EDC) to report the allocation of the final Zonal WN Summer Peak Load to defined wholesale areas within the EDC's respective zone. The allocation of the final Zonal WN Summer Peak Load to end-use customers in zone (both retail and wholesale load) must be calculated by December 31 prior to start

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the Delivery Year, in accordance with Schedule 8 Section D.1 of the Reliability Assurance Agreement.

This is a security enabled screen. Only EDC accounts are granted access and permission to update data for their specific zone. Allocations may only be entered during the month of December prior to the start of the Delivery Year. To view or submit wholesale area load data, follow the steps below:

Select **Load & Obligation → Load & Obligation**

Select the **Wholesale Area Load** tab.

Select the desired Delivery Year from the **Delivery Year** drop down list.

For the Delivery Year selected, the following data columns will be displayed and can be further filtered:

Zone: Zones for which the EDC account is responsible to allocate.

Area: Area in the zone for which the EDC account is responsible to allocate.

Load Responsible Party: Wholesale LSE that is responsible for serving the load. By default, the EDC is displayed for the main retail area in the zone.

Allocation MW: MWs allocated to the Area. By default, the main retail area in the zone is allocated the full Zonal WN Summer Peak.

For each area, click in the Load Responsible Party field to open up a dropdown box where the appropriate wholesale LSE will be selected to serve the wholesale area load. Additionally, the EDC will need to click in the Allocation MW field to open a text box where the EDC can enter the applicable MWs for that area.

Upon clicking the **Save** button, the main retail area MW allocation decreases by the MW sum of the other areas in the zone.

If you have any questions regarding this screen, please contact PJM at rpm_hotline@pjm.com.

Task 3: View Daily Load and Obligation by LSE

The daily Obligation Peak Load and resulting daily Unforced Capacity (UCAP) Obligation for an LSE are displayed in Capacity Exchange for 5 delivery days from the selected date. To view the daily Obligation Peak Load and daily UCAP Obligation data by LSE, follow the steps below:

Select Load & Obligation → Load & Obligation

Select the **Daily Load & Obligation** tab.

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Enter the desired delivery date in the **Date** field.

Starting with the date entered, the following data columns will be displayed for five consecutive delivery days, and can be further filtered:

LSE: LSE(s) with assigned daily Obligation Peak Load and UCAP Obligation data for the date selected. LSE(s) for which the user is entitled to view Obligation Peak Load and UCAP Obligation data are only displayed in the table.

Zone: Transmission zone applicable to the LSE's Obligation Peak Load and UCAP Obligation data.

Area: The retail/wholesale area in the transmission zone applicable to the LSE's Obligation Peak Load and UCAP Obligation data.

Obligation Peak Load: The LSE's Obligation Peak Load MW data for the date specified in the column heading. Obligation Peak Load in MW calculated as the LSE daily obligation peak load data uploaded by the EDC multiplied by a Daily Obligation Peak Load Scaling Factor. The uploaded MW and scaling factor are displayed on the Peak Load Summary screen.

Daily UCAP Obligation: The LSE's Daily Unforced Capacity (UCAP) Obligation for the date specified in the column heading. Daily UCAP Obligation is equal to the LSE daily Obligation Peak Load * Final Zonal RPM Scaling Factor * Forecast Pool Requirement.

*Note: UCAP Obligation data is subject to change. Corrections to Obligation Peak Load data may be made up to 12:00 PM EPT of the next business day following the operating day.

Task 4: View Uploaded Peak Load Summary Data

EDCs are responsible for uploading Obligation Peak Load data into Capacity Exchange for every LSE serving load in their retail choice zone/areas during the Delivery Year. The file upload is performed in accordance with the steps for submitting XML uploads located in the Utilities section of this document and must be submitted by the file upload deadline (36 hours prior to the start of the operating day). Corrections to Obligation Peak Load data may be made up to 12:00 EPT of the next business day following the operating day. The Peak Load Summary screen provides EDCs with a summarized view of the data uploaded via XML files and provides an LSE with a view of the Daily Scaling Factor that is applied to the EDC uploaded value. To view Peak Load Summary data, follow the steps below:

Select Load & Obligation → Load & Obligation

Select the **Peak Load Summary** tab.

Enter the desired delivery date in the **Date** field.

For the delivery date entered, the following data columns will be displayed and can be further filtered:

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LSE: LSE(s) with assigned Obligation Peak Load MW data for the date selected. If you are an LSE, only your PJM short name will appear. If you are an EDC with the ability to upload data to a zone/area, all LSEs with uploaded peak load MW data will appear.

Zone: Transmission zone for which the LSE's Obligation Peak Load data is applicable.

Area: The retail/wholesale area in the transmission zone for which LSE's Obligation Peak Load data is applicable.

Uploaded MW: The LSE's obligation peak load MW value uploaded in the XML file.

Scaling Factor: Daily Obligation Peak Load Scaling Factor is used to scale the Uploaded MW values to the fixed Annual Obligation Peak Load Allocation for the zone/area in the event that the Uploaded MW values for the zone/area do not exactly sum to the Annual Obligation Peak Load Allocation for the zone/area.

> Daily Obligation Peak Load Scaling Factor = Annual zone/area Obligation Peak Load Allocation divided by the Sum of the daily Uploaded MWs for all LSEs in zone/area

Obligation Peak Load MW: The LSE's daily Obligation Peak Load in MWs used to determine the LSE's daily UCAP Obligation. The LSE's Obligation Peak Load MW value is equal to the Uploaded MW value in the XML file * the Daily Obligation Peak Load Scaling Factor.

Task 5: View Network Service Peak Load Data

The EDC is responsible for uploading Network Service Peak Load (NSPL) data into Capacity Exchange for every LSE serving load in their zone/area during the Delivery Year. The file upload must be performed in accordance with the steps for submitting XML uploads located in the Utilities section of this document as well as be submitted by the file upload deadline (36 hours prior to the start of the operating day). Corrections to Network Service Peak Load data may be made up to 12:00 EPT of the next business day following the operating day. To view NSPL data, follow the steps below:

Select Load & Obligation → Load & Obligation

Select the **NSPL** tab.

Enter the desired delivery date in the **Date** field.

Starting with the date entered, the following data columns will be displayed for five consecutive delivery days, and can be further filtered:

LSE: LSE(s) with assigned NSPL MW for the date selected. Note: If you are an LSE, only your PJM short name will appear. If you are an EDC with the ability to upload data to a zone/area, all LSEs with uploaded NSPL MW data will appear.

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Zone: Transmission zone for which the LSE's NSPL MW data is applicable.

Area: The retail/wholesale area in the transmission zone for which the LSE's NSPL MW data is applicable.

NSPL: The LSE's Network Service Peak Load (NSPL) MW value for the date specified in the column heading.

Task 6: View Network Service Peak Load Summary Data

EDCs are responsible for uploading Network Service Peak Load (NSPL) data into Capacity Exchange for every LSE serving load in their retail choice zone/areas during the Delivery Year. The file upload must be performed in accordance with the steps for submitting XML uploads located in the Utilities section of this document and must be submitted by the file upload deadline (36 hours prior to the start of the operating day). The EDC may submit corrections to the Network Service Peak Load data up to 12:00PM Eastern Prevailing Time of the next business day following the Operating Day. The NSPL Summary provides EDCs with a summarized view of the data uploaded via XML files and provides an LSE with a view of the Daily Scaling Factor that is applied to the EDC uploaded value. To view the NSPL Summary data, follow the steps below:

Select Load & Obligation → Load & Obligation

Select the **NSPL Summary** tab.

Enter the desired delivery date in the **Date** field.

For the delivery date entered, the following data columns are displayed and can be further filtered:

LSE: LSE(s) with an assigned NSPL MW for the date selected. If you are an LSE, only your PJM short name will appear. If you are an EDC with the ability to upload data to a zone/area, all LSEs with uploaded NSPL MW data will appear.

Zone: Transmission zone for which the LSE's NSPL MW data is applicable.

Area: The retail/wholesale area in the transmission zone for which the NSPL MW data is applicable.

Uploaded MW: The LSE's NSPL MW value uploaded in the XML file.

Scaling Factor: The Daily NSPL Scaling Factor used to scale the uploaded NSPL MW values to the target NSPL MW for the zone/area in the event that the sum of the Uploaded [NSPL] MW values for all LSEs in the zone/are do not exactly sum to the target NSPL MW for the zone/area.

> Daily NSPL Scaling Factor = Target zone/area NSPL MW value divided by the Sum of the daily Uploaded [NSPL] MW values for all LSEs in the zone/area

NSPL MW: An LSE's NSPL MW value. An LSE's NSPL MW is equal to the LSE's Uploaded [NSPL] MW value in the XML file * the Daily NSPL Scaling Factor.

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Task 7: View PRD Position Details

A PRD Provider can view their PRD Position via the PRD secondary level navigation menu under the Load & Obligation primary menu. The PRD secondary navigation menu displays a PRD Provider's actual PRD position by zone/subzonal LDA and Commitment Type for a desired date. To view PRD Position details, follow the steps below:

Select **Load & Obligation → PRD**

Enter the desired delivery date in the **Date** field.

For the date entered, the following data columns will be displayed and can be further filtered:

Zone/SubZone: The zone/subzonal LDA that is applicable to the PRD Provider's PRD position for the entered date.

Commitment Type: Commitment Type (RPM or FRR) applicable to the PRD Provider's PRD position for the entered date.

Registered MW: The total amount Nominal PRD Value (in ICAP terms) registered in DR Hub (by applicable zone/subzone and commitment type) for the entered date.

Committed MW: The total amount of MWs committed (in ICAP terms) by applicable zone/subzone and commitment for the relevant Delivery Year based on the entered date.

Shortfall MW: Shortfall MW (in ICAP terms) for the zone/subzone and commitment type. The Shortfall MW is equal to the Committed MW minus the Registered MW (by zone/subzone and commitment type) for the entered date.

Resource Position

Resource Position Overview

A Resource Provider can view their LDA and resource-specific positions through the Resource Position area in Capacity Exchange. There are six secondary level menus that can be selected from the **Resource Position** primary level navigation menu:

LDA Summary: A summary of LDA position data is displayed.

Generation Resource: There are three tabs available from the Generation Position secondary level menu:

- **Position Details:** Position data for generation resources is displayed in the **Position Details** tab.

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- **UCAP Factors:** Equivalent Forced Outage Rate (EFOR) data and Accredited UCAP Factor for generation resources is displayed in **the UCAP Factors** tab.
- **ICAP Ratings:** Summer and winter installed capacity rating data for generation resources are displayed in the **ICAP Ratings** tab.

Demand Resources: Position data for Demand Resources is displayed.

Energy Efficiency Resources: Position data for Energy Efficiency Resources is displayed.

Aggregate Resources: There are two tabs available through the Aggregate Resources secondary level menu:

- **Position Details:** Position data for Aggregate Resources is displayed in **Position** Details tab.
- **Characteristics:** Details of the underlying resources that comprise the Aggregate Resource are displayed in the **Characteristics** tab.

Locational MWs: Position data for Locational MWs is displayed.

Task 1: View LDA Summary

Aggregated LDA position data is available via the LDA Summary secondary menu. The aggregated LDA position data is separated and further displayed by resource type in the LDA. To view LDA Summary data follow the steps below:

Select **Resource Position → LDA Summary**

Enter the desired delivery date in the **Date** field.

Select the desired capacity type (ICAP or UCAP) in the **Capacity Typ**e field.

The following columns will be displayed in a table and may be further filtered.

LDA: Will list all the LDAs that were modeled in the RPM Auctions for the Delivery Year corresponding to the entered date. An External Source Zone (i.e., NORTH, WEST1, WEST2, SOUTH1, and SOUTH2) may be listed for 2017/2018 through 2019/2020 Delivery Years.

The aggregate LDA level data for the entered date can be further separated and displayed by resource type in the LDA.

Resource Type: Resource Types that have position data in the LDA for the entered date. The Resource Type may be a Generation Resource (GEN), Aggregate Resource (AGG), Demand Resource (DEMAND), or Energy Efficiency Resource (EE).

Start Date: Actual start date of the displayed position data for the Resource Type.

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Stop Date: Actual stop date of the displayed position data for the Resource Type.

Owned: The total MW amount of capacity rights that company owns by modeled LDA and Resource Type for the entered date.

RPM Commitments: The total number of MWs by modeled LDA and Resource Type that were committed via RPM Auctions, or transactions for the entered date.

FRR Commitments: The total number of MWs by modeled LDA and Resource Type that were committed in an FRR Capacity Plan for the entered date.

Unoffered: The total number of MWs by modeled LDA and Resource Type that were not offered into the Delivery Year Base Residual Auction or subsequent Incremental Auctions for the entered date.

Positive Available: The total MW amount of positive Available capacity by modeled LDA and Resource Type for the entered date.

RPM Deficiency: The total MW amount of positive RPM commitment compliance shortfalls by modeled LDA and Resource Type for the entered date.

Task 2: View Resource Position Details for Generation Resources

The **Position Details** tab for generation resources displays the actual position by generation resource for a desired date. To view position details for generation resources, follow the steps below:

Select **Resource Position → Generation Resources**

The screen will default to the **Position Details** tab.

Enter the desired delivery date in the **Date** field.

Select the desired capacity type (ICAP or UCAP) in the **Capacity Typ**e field

Based on the filter criteria selected, a list of generation resources will be displayed in a table format where the position detail data relevant to the date entered can be viewed. The following columns will be displayed and may be further filtered.

Resource ID: The unique identifier for the generation resource.

Resource Name: The name of the generation resource.

Zone: The transmission zone where the generation resource is modeled.

LDA: The LDA where the generation resource is modeled.

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CP Eligible: Yes or No indicates whether the generation resource is eligible to take on a CP commitment. The CP Eligible column will not appear prior to 2016/2017 Delivery Year.

Current EFORd: The latest one-year EFORd for the generation resource that is available. The one-year EFORd for a Delivery Year is finalized by November 30th prior to the stat of the Delivery Year. The column will no longer display effective with the 2025/2026 Delivery Year.

Accredited UCAP Factor: The Accredited UCAP Factor is the value established by PJM in accordance with RAA, Schedule 9.2. The value is used to calculate UCAP MW of Generation Capacity Resource. The column will display effective with the 2025/2026 Delivery Year.

Start Date: Actual start date of the displayed position data for the generation resource.

Stop Date: Actual stop date of the displayed position data for the generation resource.

MOPR Type: Identifies the MOPR Type applicable to the position of the resource for the entered date. This column is applicable to 2022/2023 DY.

Owned: The MW amount of capacity rights that a company owns on the generation resource for the entered date.

Available: The positive MW amount of Available capacity on the generation resource for the entered date.

RPM Non-CP Committed: Amount of MWs committed through the RPM Auctions or RPM transactions as a product type other than Capacity Performance for the entered date. Column will no longer display effective with the 2020/2021 Delivery Year.

FRR Non-CP Committed: Amount of MWs committed to a FRR Capacity Plan as a product type other than Capacity Performance for the selected date. Column will no longer display effective with the 2020/2021 Delivery Year.

RPM CP Committed: Amount of MWs committed through RPM Auctions or RPM transactions as Capacity Performance product type for the entered date.

FRR CP Committed: Amount of MWs committed to a FRR Capacity Plan as Capacity Performance product type for the entered date.

Unoffered: Amount of MWs on the generation resource that was not offered into the Base Residual Auction or subsequent Incremental Auctions for a given Delivery Year. This value cannot be offered into any subsequent Auctions that are run for that Delivery Year nor used in any location UCAP or replacement capacity transactions for that Delivery Year.

RPM Position: Total MWs eligible to satisfy RPM commitments for the entered date.

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RPM Deficiency: MW amount of positive RPM commitment compliance shortfall for the generation resource for the entered date. The RPM Deficiency is equal to the total RPM (non-CP and CP) Committed minus the RPM Position for the generation resource for the entered date.

Task 3: View UCAP Factors for Generation Resources

The UCAP Factors tab for generation resources displays the EFOR values and Accredited UCAP Factor for generation resources. EFORd at BRA, EFORd-5 at BRA, current EFORd, current EFORd-5, and EFORp can be viewed for a party's generation resources for delivery year before 2025/2026. Accredited UCAP Factors will be viewed for delivery year starting from 2025/2026. To view UCAP Factors for generation resources follow the steps below:

Select **Resource Position → Generation Resources**

Select the **UCAP Factors** tab.

Enter the desired Delivery Year in the **Delivery Year** field.

Select the desired Resource or ALL resources in the **Resource** field.

Based on the filter criteria selected, a list of generation resource(s) will be displayed in a table format where the EFOR data relevant to the Delivery Year entered can be viewed. The following columns will be displayed and may be further filtered:

Resource Name: The name of the generation resource.

Resource ID: The unique identifier for the generation resource.

Accredited UCAP Factor: The Accredited UCAP Factor is the value established by PJM in accordance with RAA, Schedule 9.2. The value is used to calculate UCAP MW of Generation Capacity Resource. The column will display value effective with the 2025/2026 Delivery Year.

EFORd at BRA: The one-year Equivalent Forced Outage Rate Demand (EFORd) value for the generation resource that was used during the Base Residual Auction for the entered Delivery Year.

EFORd-5 at BRA: The 5 year average EFORd value for the generation resource that was used during the Base Residual Auction for the entered Delivery Year.

EFORd: The latest one-year EFORd value for the generation resource that is available. The one-year EFORd for a Delivery Year is finalized by November 30th prior to the start of such Delivery Year.

EFORd-5: The latest 5 year average EFORd for the generation resource that is available. The EFORd-5 for a Delivery Year is finalized by November 30th prior to the start of such Delivery Year.

EFORp: The Peak-Period Equivalent Forced Outage Rate (EFORp) for the generation resource for the entered Delivery Year.

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Task 4: View ICAP Ratings for Generation Resources

The ICAP Ratings tab displays the Summer and Winter installed capacity ratings for generation resources. To view the ICAP Ratings for a generation resource follow the steps below.

Select **Resource Position → Generation Resources**

Select the **ICAP Ratings** tab.

Enter the desired delivery date in the **Date** field.

Based on the filter criteria selected, a list of generation resources will be displayed in a table format where the ICAP rating data relevant to the date entered can be viewed. The following columns will be displayed and may be further filtered.

Resource ID: The unique identifier for the generation resource.

Resource Name: The name of the generation resource.

Summer Rating: The summer installed capacity rating of the generation resource that is effective for the entered date.

Winter Rating: The winter installed capacity rating of the generation resource that is effective for the entered date.

Task 5: View ELCC Values for Generation Resources

The ELCC Values tab for generation resources displays the ELCC values for generation resources. To view the ELCC values for a generation resource follow the steps below.

Select **Resource Position → Generation Resources**

Select the **ELCC Values** tab.

Enter the desired Delivery Year in the **Delivery Year** field.

Based on the filter criteria selected, a list of generation resource(s) will be displayed in a table format where the ELCC data relevant to the Delivery Year entered can be viewed. The following columns will be displayed and may be further filtered:

Resource ID: The unique identifier for the generation resource.

Resource Name: The name of the generation resource.

Queue: The interconnection queue linked to the resource.

Resource Type: The resource type of the generation resource.

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Effective Nameplate: The nameplate of the generation resource of battery energy storage, solar and wind generation resource types used in the determination of the accredited UCAP. If this is associated with a new interconnection request then it will display the additional MW added under that queue.

ELCC Class Rating: The class rating of the ELCC generation resource used in the determination of the accredited UCAP.

Performance Adjustment: The performance adjustment of the ELCC generation resource used in the determination of the accredited UCAP.

Task 6: View Position Details for Demand Resources

The position details for Demand Resources are available through the Demand Resources secondary level menu. To view actual position details for Demand Resources for a desired date follow the steps below:

Select **Resource Position → Demand Resources**

Enter the desired delivery date in the **Date** field.

Select the desired capacity type (ICAP or UCAP) in the **Capacity Typ**e field.

Based on the filter criteria selected, a list of Demand Resources will be displayed in a table format where the position detail data relevant to the date entered can be viewed. The following columns will be displayed and may be further filtered.

Resource ID: The unique identifier for the Demand Resource.

Resource Name: The name of the Demand Resource.

Zone: The transmission zone where the Demand Resource is modeled.

LDA: The LDA in which the Demand Resource is modeled.

Product Type: The product-type of the Demand Resource.

CP Eligible: Yes or No indicates whether the Demand Resource is eligible to take on a CP commitment. The CP Eligible column will not appear prior to 2016/2017 Delivery Year.

Start Date: Actual start date of the displayed position data for the Demand Resource.

Stop Date: Actual stop date of the displayed position data for the Demand Resource.

MOPR Type: Identifies the MOPR Type applicable to the position of the resource for the entered date. This column is applicable to 2022/2023 DY.

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Owned: The total nominated amount of approved Load Response registrations linked to the Demand Resource for the entered date.

Available: The positive MW amount of Available capacity on the Demand Resource for the entered date.

RPM Non-CP Committed: Amount of MWs committed through the RPM Auctions or RPM transactions as a product type other than Capacity Performance for the entered date. Column will no longer display effective with the 2020/2021 Delivery Year.

FRR Non-CP Committed: Amount of MWs committed to a FRR Capacity Plan as a product type other than Capacity Performance for the entered date. Column will no longer display effective with the 2020/2021 Delivery Year.

RPM CP Committed: Amount of MWs committed through RPM Auctions or RPM transactions as Capacity Performance product type for the entered date.

FRR CP Committed: Amount of MWs committed to a FRR Capacity Plan as Capacity Performance product type for the entered date.

FRR CP Committed: Number of MWs committed to a FRR Capacity Plan as Capacity Performance product type for the entered date.

Unoffered: Zero MWs will be displayed for a Demand Resource. Demand Resources do not have a must offer requirement in RPM Auctions.

RPM Position: Total MWs eligible to satisfy RPM commitments for the entered date.

RPM Deficiency: MW amount of positive RPM commitment compliance shortfall for the Demand Resource for the entered date. The RPM Deficiency is equal to the total RPM (non-CP and CP) Committed minus the RPM Position for the Demand Resource for the entered date.

Task 7: View Resource Position Detail for Energy Efficiency Resources

The position details for Energy Efficiency Resources are available through the Energy Efficiency Resources secondary level menu. To view actual position details for Energy Efficiency Resources for a desired date follow the steps below:

Select **Resource Position → Energy Efficiency Resources**

Enter the desired delivery date in the **Date** field.

Select the desired capacity type (ICAP or UCAP) in the **Capacity Typ**e field.

Based on the filter criteria selected, a list of Energy Efficiency (EE) Resources will be displayed in a table format where the position detail data relevant to the date entered can be viewed. The following columns will be displayed and may be further filtered.

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Resource ID: The unique identifier for the EE Resource.

Resource Name: The name of the EE Resource.

Zone: The transmission zone where the EE Resource is modeled.

LDA: The LDA where the EE Resource is modeled.

CP Eligible: Yes or No indicates whether the EE Resource is eligible to take on a CP commitment. The CP Eligible column will not appear prior to 2016/2017 Delivery Year.

Installation Period: The installation period that applies to the EE Resource.

Start Date: Actual start date of the displayed position data for the EE Resource.

Stop Date: Actual stop date of the displayed position data for the EE Resource.

MOPR Type: Identifies the MOPR Type applicable to the position of the resource for the entered date. This column is applicable to 2022/2023 DY.

Owned: The amount of MWs that were certified via a PJM approved Delivery Year Post-Installation Measurement and Verification Report and for which the company has ownership rights for the entered date.

Available: The positive MW amount of Available capacity on the EE Resource for the entered date.

RPM Non-CP Committed: Amount of MWs committed through the RPM Auctions or RPM transactions as a product type other than Capacity Performance for the entered date. Column will no longer display effective with the 2020/2021 Delivery Year.

FRR Non-CP Committed: Amount of MWs committed to a FRR Capacity Plan as a product type other than Capacity Performance for the selected date. Column will no longer display effective with the 2020/2021 Delivery Year.

RPM CP Committed: Amount of MWs committed through RPM Auctions or RPM transactions as Capacity Performance product type for the entered date.

FRR CP Committed: Amount of MWs committed to a FRR Capacity Plan as Capacity Performance product type for the entered date.

FRR CP Committed: Number of MWs committed to a FRR Capacity Plan as Capacity Performance product type for the entered date.

Unoffered: Zero MWs will be displayed for an EE Resource. Energy Efficiency Resources do not have a must offer requirement in RPM Auctions.

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RPM Position: Total MWs eligible to satisfy RPM commitments for the entered date.

RPM Deficiency: MW amount of positive RPM commitment compliance shortfall for the EE Resource. The RPM Deficiency is equal to the total RPM (non-CP and CP) Committed minus the RPM Position for the EE Resource for the entered date.

Task 8: View Resource Position Detail for Aggregate Resources

The position details for Aggregate Resources are available through the Aggregate Resources secondary level menu. To view actual position details for Aggregate Resources for a desired date follow the steps below:

Select **Resource Position → Aggregate Resources**

The screen will default to the **Position Details** tab.

Enter the desired delivery date in the **Date** field.

Select the desired capacity type (ICAP or UCAP) in the **Capacity Typ**e field.

Based on the filter criteria selected, a list of Aggregate Resources will be displayed in a table format where the position detail data relevant to the date entered can be viewed. The following columns will be displayed and may be further filtered.

Aggregate ID: The unique identifier for the Aggregate Resource.

Aggregate Resource Name: The name of the Aggregate Resource.

LDA: The LDA where the Aggregate Resource is modeled.

Start Date: Actual start date of the displayed position data for the Aggregate Resource.

Stop Date: Actual stop date of the displayed position data for the Aggregate Resource.

Owned: The MW amount of capacity rights that a company owns on the Aggregate Resource for the entered date.

Available: The positive MW amount of Available capacity on the Aggregate Resource for the entered date.

RPM Non-CP Committed: Amount of MWs committed through the RPM Auctions or RPM transactions as a product type other than Capacity Performance for the entered date. Column will no longer display effective with the 2020/2021 Delivery Year.

FRR Non-CP Committed: Amount of MWs committed to a FRR Capacity Plan as a product type other than Capacity Performance for the selected date. Column will no longer display effective with the 2020/2021 Delivery Year.

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RPM CP Committed: Amount of MWs committed through RPM Auctions or RPM transactions as Capacity Performance product type for the entered date.

FRR CP Committed: Amount of MWs committed to a FRR Capacity Plan as Capacity Performance product type for the entered date.

RPM Position: Total MWs eligible to satisfy RPM commitments for the entered date.

RPM Deficiency: MW amount of positive RPM commitment compliance shortfall for the Aggregate Resource. The RPM Deficiency is equal to the total RPM (non-CP and CP) Committed minus the RPM Position for the entered date.

Task 9: View Characteristics of Aggregate Resources

The Characteristics tab available through the Aggregate Resources secondary level menu displays detailed information about the underlying resources that make up each Aggregate Resource. To view the characteristics of an Aggregate Resource follow the steps below.

Select **Resource Position → Aggregate Resources**

Select **Characteristics** tab

Enter the desired delivery date in the **Date** field.

Select the desired capacity type (ICAP or UCAP) in the **Capacity Typ**e field.

Based on the filter criteria selected, a list of Aggregate Resources and the characteristics of the underlying resources that comprise Aggregate Resource will be displayed in a table format for the date entered. The following columns will be displayed for the entered date and may be further filtered:

Aggregate Resource Name: The name of the Aggregate Resource.

Aggregate ID: The unique identifier for the Aggregate Resource.

Aggregate LDA: The LDA where the Aggregate Resource is modeled.

Aggregate MW: Total MW value of the Aggregate Resource.

Resource ID: The unique identifier for an underlying resource that is part of the Aggregate Resource.

Resource Name: The name of the underlying resource that is part of the Aggregate Resource.

Resource LDA: The modeled LDA of the underlying resource that is part of the Aggregate Resource.

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Unit Type: The unit type of the underlying resource that is part of the Aggregate Resource.

Task 10: View Position Detail for Locational MWs

To view the position detail for locational unforced capacity MWs acquired via RPM Incremental Auctions or bilaterally (through Cleared Buy Bid or Location UCAP transactions), follow the steps below.

Select **Resource Position → Locational MW**

Enter the desired delivery date in the **Date** field.

Based on the date selected, a list of modeled LDAs will be displayed in a table format where the data relevant to the date entered can be viewed. The following columns will be displayed and may be further filtered:

LDA: The LDA in which the cleared buy bids or Locational UCAP MWs are located.

Auction Type: The Incremental Auction that is applicable to the cleared buy bids. An Auction type of "Nonauction" represents any Locational UCAP MW purchased in bilateral Locational UCAP transactions.

Product Type: The product type of the cleared buy bids or locational UCAP MWs.

Start Date: Actual start date of the displayed position data for the Locational MWs.

Stop Date: Actual stop date of the displayed position data for the Locational MWs.

Owned: The MW amount of cleared buy bids or Locational UCAP MWs that a company owns for the entered date.

Committed: The MW amount of cleared buy bids or Locational UCAP MWs used in replacement capacity transaction(s) for the entered date.

Available: The MW amount of remaining cleared buy bids or Location UCAP MWs available to use as replacement capacity for the entered date.

Transactions

Transactions Overview

There are two secondary level menus that can be selected from the **Transactions** primary level navigation menu:

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Capacity Transactions: Allows participants to view capacity transactions or create various types of capacity transactions.

Capacity Postings: Capacity Postings is the electronic bulletin board in Capacity Exchange, which allows participants to post and view requests to buy or offers to sell capacity resources. The purpose of the bulletin board functionality is to facilitate bilateral transaction activity.

Transaction Types

There are several transaction types available in Capacity Exchange.

Capacity Modification: A Capacity Modification is used to add a new unit, remove an existing unit, or to request a MW increase or decrease in the summer or winter installed capacity rating of an existing unit.

Ownership Change: An Ownership Change transaction is used to submit a change in the ownership of a generation resource. This can only be created starting with a Delivery Year for which no RPM Auction has taken place.

Unit Specific: A Unit Specific bilateral transaction is used to transfer the capacity rights of a specified amount of installed capacity from one party to another.

Locational UCAP Transfer: A Locational UCAP Transfer transaction is used to transfer Locational UCAP MWs sourced from available resource-specific capacity to another party.

Cleared Buy Bid: A Cleared Buy Bid transaction is used to transfer the Cleared Buy Bids procured in an Incremental Auction from one party to another.

Auction Specific: An Auction Specific transaction is used to transfer the credits associated with physical MW of capacity from a seller to a buyer at the location of the physical resources identified as supplying the transaction. Auction Specific MW transactions do not transfer the performance risk to the buyer. This transaction type is effective June 1, 2010.

Replacement: A Replacement transaction is used to transfer the RPM commitment from one resource to another resource or to use Locational MWs (cleared buy bids from Incremental Auction or Locational UCAP purchased bilaterally) to offset an existing RPM Commitment.

PRD Transfer: A PRD Transfer transaction is used to transfer the obligation to provide price responsive demand (PRD) to another PRD Provider during the Delivery Year.

Demand Resource Modification: A Demand Resource Modification is used to add a new Demand Resource, remove an existing Demand Resource, or to increase or decrease the nominated value of a DR resource in your portfolio. *A Demand Resource Modification is no longer used by participants starting June 1, 2015.*

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Energy Efficiency Modification: An Energy Efficiency Modification is used to add a new Energy Efficiency Resource, remove an existing Energy Efficiency Resource, or to increase or decrease the nominated value of an Energy Efficiency resource in your portfolio. *An Energy Efficiency Modification is no longer used by participants starting June 1, 2015.*

Non-Unit Specific: A Non-Unit specific bilateral transaction was used to create a financial-only transaction between two parties. Non-unit specific transactions did not change the resource position or load obligation of an entity. *Non-Unit Specific bilateral transactions are no longer able to be reported by participants to PJM after May 31, 2010.*

Transaction Status

An existing transaction in Capacity Exchange has a transaction status. The transaction statuses in Capacity Exchange are:

- **Buyer Denied:** Data submitted is not approved by the Buyer. Once the transaction is denied, a new transaction can be created to fix any data errors.
- **Denied:** Data submitted is not approved by PJM. Once the transaction is denied, a new transaction can be created to fix any data errors.
- **PJM Withdrawn:** If the start date of the transaction passes the current date, the transaction status is automatically changed to PJM Withdrawn.
- **Provisionally Approved:** If a Capacity Modification is not yet physically implemented; however, PJM considers the Capacity Modification can reasonably be in service by the start date of the Capacity Modification, the Capacity Modification will be set to Provisionally Approved to allow the resource to offer MWs into an RPM Auction.
- **Failed Validation:** Data submitted in the transaction causes the transaction to fail validation checks.
- **Pending PJM:** Transaction requires further review by PJM. The following transactions automatically go to Pending PJM status for further review by PJM: (1) Unit-specific transactions with External Party as the Buyer (2) Unit-specific transactions for Cleared MWs from a resource for which there is an Auction Specific MW transaction that has already been approved; and (3) Retroactive replacement transactions submitted as a result of a Performance Assessment Interval.
- **Approved:** The transaction is approved by PJM.

A request to cancel or change the start date or end date of an approved bilateral transaction must be prospectively submitted to the RPM Hotline at rpm_hotline@pjm.com with both Buyer and Seller included in the email notification to PJM.

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Task 1: View Existing Capacity Transactions

A Resource Provider can view existing capacity transactions through the **Capacity Transactions** secondary level menu. To view existing capacity transactions that are effective during a desired start date and stop date, follow the steps below:

Select **Transactions → Capacity Transactions**

Enter the desired start date and stop date in the **Start Date** and **Stop Date** fields.

Based on the Start Date and Stop Date entered, a list of existing capacity transactions that are effective for the entered dates are be displayed in table format. The following columns are displayed and may be further filtered:

ID: The identification number applicable to the transaction.

Type: The type of transaction (i.e., Auction Specific, Cleared Buy Bid, Capacity Modification, Ownership Change, Replacement, Locational UCAP, Unit Specific, Energy Efficiency Modification), Demand Resource Modification, or PRD Transfer).

Company Name: The short name of the Company in a single-party transaction (i.e., Capacity Modification, Demand Resource Modification, Energy Efficiency Modification, or Replacement)

Resource Name: The name of the Resource involved in the transaction.

Start Date: The start date of the transaction.

Stop Date: The stop date of the transaction.

Buyer Name: The Company short name of the Buyer in the transaction.

Seller Name: The Company short name of the Seller in the transaction.

MW: The MW amount of the transaction.

Status: The status of the transaction.

To view the details of a specific transaction, click on the desired transaction row to highlight the transaction. Right click on the highlighted transaction row and select **View**. A transaction pop up window appears with the details of the specific transaction.

Click the **Close** button to close the transaction pop-up window and return to the **Capacity Transactions** secondary level menu.

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Task 2: Create a Capacity Modification (CAP MOD)

A Capacity Modification (CAP MOD) is used by primary owner/operator of a generation resource to request the addition of a new unit or the removal of an existing unit from the primary owner/operator's resource portfolio in Capacity Exchange, or to request a MW increase or decrease in the summer or winter installed capacity rating of an existing unit. CAP MODs will not be approved by PJM during an open auction window. To create a Capacity Modification, follow the steps below:

Select **Transactions → Capacity Transactions**

Right click **Create Transaction** button

Select **Capacity Modification** from drop down list.

A pop-up window opens for the user to submit the required data for a Capacity Modification.

Resource: Select the name of your resource from the Resource drop down list. If the name of the Resource is not listed in the drop down list, contact the RPM Hotline at rpm_hotline@pjm.com to initiate the modeling of the unit in Capacity Exchange.

Start Date: Enter the start date of increase or decrease in the installed capacity value. All Cap Mods must be submitted at least 2 business days prior to the start date.

Type: Select the description that best explains the reason for the Cap Mod from the drop down list.

- *Derating* – lowering the Installed Capacity value of the generator (should be selected when installing environmental controls or loss of Capacity Injection Rights).
- *Existing CIRs* – increasing the Installed capacity value of the generator to be within the existing Capacity Injection Rights.
- *Integration* – adding a generation resource as a result of an integration of an area to the PJM Region.
- *Planned Generator* – adding a brand new generator that is not yet in service.
- *Planned Uprate* – performing an upgrade on an existing resource.
- *Repower* – repowering a formerly mothballed or retired unit.
- *Retirement* – retiring a unit.
- *Unit Modeling* – aggregating or disaggregating an existing generator (e.g., modeled as a combined cycle (CC) resource, but wish to break into individual generator components).

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- *Wind Factor Change* – update the installed capacity value of a wind farm based on operational performance data.
- *Solar Factor Change* – update the installed capacity value of a solar farm based on operational performance data.

Queue Number: If you have a planned generator or uprate, you must select the Interconnection Queue number applicable to the project from drop down list.

Summer MW (ICAP): Enter the amount of MWs to increase (positive value) or decrease (negative value) from the current summer installed capacity value of the unit to the nearest tenth of a decimal place. Do not enter the final summer installed capacity value of the unit, a CAP MOD works on an incremental basis.

Winter MW (ICAP): Enter the amount of MWs to increase (positive value) or decrease (negative value) from the current winter installed capacity value of the unit to the nearest tenth of a decimal place. Do not enter the final winter installed capacity value of the unit, CAP MODs work on an incremental basis.

Add Comment: Enter any desired comment(s).

Click the **Save** button.

Verify the transaction is now in "Pending PJM" status.

Click the **Close** button to close the window and return to **Capacity Transactions** secondary level menu.

Task 3: Create a Ownership Change Transaction

A unit Ownership Change transaction represents the sale of a generation resource from one party to another party. Once approved, the ICAP value of the resource is transferred from the Seller to the Buyer. An Ownership Change transaction can only be entered for a Delivery Year where no RPM Auctions have been conducted and will also be denied if the owner does not have possession of the entire ICAP value of the unit from the date of sale onward (i.e., a unit specific transaction spans the date of sale). An Ownership Change transaction must be initiated by the Seller. To create a Ownership Change Transaction, follow the steps below:

Select **Transactions → Capacity Transactions**

Right click **Create Transaction** button.

Select **Ownership Change** from the drop down list.

A pop-up window opens where the data necessary to create the Ownership Change transaction is entered. Enter the required data as described below.

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Start Date: Enter the date of the first DY in which an RPM Auction has not been conducted.

Seller: Defaults to the short name of the Company displayed in the Single User Multi Account (SUMA) company account drop down list.

Buyer: Select the short name of the participant who will act as the Buyer of the transaction.

Resource: Select the appropriate resource name to be sold from the drop down list.

Add Comment: Enter any desired comment(s).

Click the **Save** button**.**

The following additional data is populated once the transaction is submitted.

Summer ICAP (MW): Summer ICAP value on the date of sale.

Winter ICAP (MW): Winter ICAP value on the date of sale.

Verify the transaction is now in "Pending Buyer" status.

An Ownership Change transaction created by the Seller needs to be approved by the Buyer in order for the transaction to be approved. A Buyer confirms or denies the transaction by selecting **Confirm** or **Approve** from the **Apply Action** drop down list.

Click the **Close** button to close the transaction pop-up window and to return to the **Capacity Transactions** secondary level menu.

Task 4: Create a Unit Specific Transaction

A bilateral Unit Specific transaction is used to transfer the capacity rights of a specified amount of installed capacity from one party to another party. A Unit Specific transaction cannot be created, withdrawn, or approved during an open auction window. A Unit Specific transaction must be initiated by the Seller in the Unit Specific transaction. To create a bilateral Unit Specific transaction, follow the steps below:

Select **Transactions → Capacity Transactions**

Click the **Create** button.

Select **Unit Specific** from the drop down list.

A pop-up window opens where the data necessary to create the bilateral Unit Specific transaction can be entered. Enter the required data as described below.

Start Date: Enter the date the transaction should start.

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Stop Date: Enter the date the transaction should end.

Seller: Defaults to the short name of the Company displayed in the Single User Multi Account (SUMA) company account drop down list.

Buyer: Select the short name of the participant who will act as the Buyer of the installed capacity from the available Buyer drop down list.

Resource: Select the name of your resource from the Resource drop down list. The drop down list is populated from the list of available units belonging to the Seller.

Capacity Type: Select the appropriate type of capacity to be transacted (i.e., Available, Unoffered, or Cleared).

Note:

- Only Available capacity can be transacted before the RPM Auctions are run for a particular Delivery Year.
- Unoffered capacity can only be transacted to an External Party or an FRR Entity.

MW: Enter the amount of MW to be transacted by the Seller to the nearest tenth of a decimal place in ICAP terms for Available MW and Unoffered MW, in UCAP terms for Cleared MW. A corresponding ICAP value to transfer is calculated using the then current EFORd of the unit at the time when the Unit Specific transaction for Cleared MWs is approved.

Exempt MW (ICAP): Enter the amount of MW considered as exempt to be transacted by the Seller to the nearest tenth of a decimal place in ICAP terms. This field is applicable to 2022/2023 DY.

Existing MW (ICAP): Enter the amount of MW considered as existing for MOPR to be transacted by the Seller to the nearest tenth of a decimal place in ICAP terms. This field is applicable to 2022/2023 DY.

New MW (ICAP): Enter the amount of MW considered as new for MOPR to be transacted by the Seller to the nearest tenth of a decimal place in ICAP terms. This field is applicable to 2022/2023 DY.

Total MW (ICAP): This value will be calculated as the sum of the Exempt MW (ICAP) + Existing MW (ICAP) + New MW (ICAP) fields. This field is applicable to 2022/2023 DY.

The following additional fields are required to be populated for a Unit Specific transaction for Cleared MWs only:

Auction Type: In the event that multiple auctions have cleared for the entered dates, select the applicable RPM Auction from the drop down list.

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Cleared Product Type: Select the applicable cleared product type from the drop down list. The field is effective from June 1, 2018 to May 31, 2020. Starting on June 1, 2020 this field is auto-populated with Capacity Performance product type.

Cleared Season: Select the applicable cleared season from the drop down list. This field is effective June 1, 2020.

Clearing Price: Select the applicable clearing price from the drop down list. This field is effective June 1, 2020.

Cleared MOPR Type: Select the applicable MOPR Type that cleared from the drop down list. This field is applicable to 2022/2023 DY.

Elected Competitive Exemption: Checkbox indicating that the resource cleared under the competitive exemption. This field is applicable to 2022/2023 DY.

Add Comment: Enter any desired comment(s). For imports of external generation resources, the intervening system(s) (Firm Point to Point) and PJM (external network designated) OASIS transmission reservation numbers are required and must be entered in the Comments field for transaction's status to be changed to Approved.

Click the **Save** button.

Verify the transaction is now in "Pending Buyer" status.

A Unit Specific transaction created by the Seller needs to be approved by the Buyer in order for the transaction to be approved. A Buyer confirms or denies the transaction by selecting **Confirm** or **Approve** from the **Apply Action** drop down list.

Click the **Close** button to close the transaction popup window and return to the **Capacity Transactions** secondary level menu.

Task 5: Create a Locational UCAP Transaction

A Locational UCAP transaction allows a party with available resource specific capacity to transfer Locational UCAP to another party. The Buyer may use the Locational UCAP as a replacement resource in a Replacement Capacity transaction. A Locational UCAP transaction that impacts the Delivery Year cannot be created during the Third Incremental Auction corresponding to the Delivery Year. Locational UCAP MWs are not eligible to be offered in an RPM Auction. Locational UCAP transactions result in an RPM Resource Commitment in UCAP terms equal to the MW amount of the Locational UCAP transacted being placed on the Seller's specified resource for the term of the transaction. The Seller of the Locational UCAP transaction is subject to all applicable resource performance assessments. A Locational UCAP transaction must be initiated by the Seller of the transaction. Locational UCAP transactions are only accepted during certain time periods in accordance with Manual 18.

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Select **Transactions → Capacity Transactions**

Right click the **Create Transaction** button.

Select **Locational UCAP Transfer** from the drop down list.

A pop-up window opens where the data necessary to create a bilateral Locational UCAP Transfer transaction can be entered. Enter the required data as described below.

Start Date: Enter the start date of the transaction.

Stop Date: Enter the stop date of the transaction.

Seller: Defaults to the short name of the Company displayed in the Single User Multi Account (SUMA) company account drop down list.

Buyer: Select the short name of the participant who will act as the Buyer from the available Buyer drop down list.

Resource: Select a resource from the Resource drop down list. The list is populated with resources that have available capacity for the entered dates.

LDA: The LDA defaults to the modeled LDA of the selected resource...

Product Type: Select the product type of the Locational MW being transferred.

MW (UCAP): Enter the amount of MW to be transferred in UCAP terms. **Smallest unit is 0.1 MW.

Available MW Display: Displays the available MW in UCAP terms for the selected Resource.

Add Comment: Enter any desired comment(s).

Click the **Save** button.

Verify the transaction is now in "Pending Buyer" status.

A Locational UCAP transaction created by the Seller needs to be approved by the Buyer in order for the transaction to be approved. A Buyer confirms or denies the transaction by selecting **Confirm** or **Approve** from the **Apply Action** drop down list.

Click the **Close** button to close the transaction popup window and return to the **Capacity Transactions** secondary level menu.

Task 6: Create a Cleared Buy Bid Transaction

A Cleared Buy Bid transaction is used to transfer Cleared Buy Bids procured in an Incremental Auction from one party to another party. Transfers can be specified up to the quantity of MW

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purchased in an Incremental RPM Auction on an LDA and product-type level. A Cleared Buy Bid transaction must be initiated by the Seller in the transaction. The Locational MW secondary level menu provides a summary of the Cleared Buy Bids available to sell for an entered date. To create a Cleared Buy Bid transaction, follow the steps below:

Select **Transactions → Capacity Transactions**

Right click the **Create Transaction** button.

Select **Cleared Buy Bid** from the drop down list.

A pop-up window opens where the data necessary to create the Cleared Buy Bid transaction is entered. Enter the required data as described below.

Start Date: Enter the start date of the transaction.

Stop Date: Enter the stop date of the transaction.

Seller: Defaults to the short name of the Company displayed in the Single User Multi Account (SUMA) company account drop down list.

Buyer: Select the name of the participant who is the Buyer of the transaction.

Auction Type: Select the RPM Auction name applicable to the Cleared Buy Bids from the drop down list.

LDA: Select the name of the LDA applicable to the Cleared Buy Bids from the drop down list.

Product Type: Select the product type applicable to the Cleared Buy Bids from the drop down list.

Cleared MW (UCAP): Enter the amount of cleared buy bid MWs to transfer to the Buyer in terms of unforced capacity.

Add Comment: Enter any desired comment(s).

Click the **Save** button.

Verify the transaction is now in "Pending Buyer" status.

A Cleared Buy Bid transaction created by the Seller needs to be approved by the Buyer in order for the transaction to be approved. A Buyer confirms or denies the transaction by selecting **Confirm** or **Approve** from the **Apply Action** drop down list.

Click the **Close** button to close the transaction pop-up window and to return to the Capacity Transactions secondary level menu.

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Task 7: Create an Auction Specific MW Transaction

An Auction Specific MW transaction allows a participant to transfer physical MW of capacity from a seller to a buyer at the location of the physical resources identified as supply in the transaction for a specific Auction.

Delivery Year Auction Specific MW transactions cannot be created, withdrawn, or approved during an open auction window. Auction Specific MW transactions must be reported prior to the start of the applicable Delivery Year and be applicable for the entire Delivery Year. Effective with the 2020/2021 Delivery Year, Auction Specific MW transactions for MW cleared for a seasonal period must be reported for the seasonal period prior to the start of the DY and can only be created for one season at a time. In order to transact Summer period MW, two transactions need to be created, one from June 1st to October 30th and a second transaction from May 1st to May 31st for the same MW quantity.

An Auction Specific MW transaction must be initiated by the Seller of the transaction. To create an Auction Specific MW transaction, follow the steps below:

Select **Transactions → Capacity Transactions**

Right click the **Create Transaction** button.

Select **Auction Specific** from the drop down list.

A pop-up window opens where the data necessary to create the Auction Specific MW transaction is entered. Enter the required data as described below.

Start Date: Enter the start date of the transaction. An Auction Specific MW transaction must be in the "Approved" status prior to the start of the Delivery Year.

Stop Date: Enter the stop date of the transaction. The stop date of the Auction Specific MW transaction must be the last day of the corresponding Delivery Year. Starting with the 2020/2021 DY, the Stop Date must be the last day of the corresponding season being transacted.

Seller: Defaults to the short name of the Company displayed in the Single User Multi Account (SUMA) company account drop down list.

Buyer: Select the short name of the participant who is the Buyer of the transaction. The Buyer cannot be the same name as Seller.

Eligible Resources: A list of resources in the Seller's account are displayed in a table format with the eligible MW amount (in UCAP terms) that can be transacted for the entered start and end dates. To enter the amount of UCAP MW to be transacted for a specific Resource, Auction Type, Product Type, and Price. Click on the row of the desired resource to highlight the row. Once highlighted, enter the amount of UCAP MW to be transacted in the MW (UCAP) field. Starting with the 2020/2021 DY, the amount of UCAP MW to be transacted will be selected for the specific Resource,

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Auction Type, Season, and Price. The smallest increment that may be transacted through an Auction Specific transaction is 0.1 MW.

Add Comment: Enter any desired comment(s).

Click the **Save** button.

Average Price: Once the transaction is submitted, the Average Price of the transaction is displayed. The average price is the weighted average of the clearing prices of the resources selected in the Eligible Resources table, weighted by the UCAP MWs entered for the specific resource in the Eligible Resources table. Verify that the Average Price is accurate.

Total MW (UCAP): Once the transaction is submitted, the total MWs entered in the Eligible Resources table is displayed.

An Auction Specific MW transaction created by the Seller needs to be approved by the Buyer in order for the transaction to be approved. A Buyer confirms or denies the transaction by selecting **Confirm** or **Approve** from the **Apply Action** drop down list.

Click the **Close** button to close the transaction pop-up window and to return to the **Capacity Transactions** secondary level menu.

Task 8: Create a Replacement Transaction

A Replacement transaction is used to transfer the RPM commitment from one resource to another. Replacements can be specified up to the quantity of MWs committed on a resource.

A replacement transaction for a generation resource can only be specified once the EFORd is finalized by PJM for the Delivery Year and only up to the resource's deficient amount prior to the Third Incremental Auction. After the Third Incremental Auction, a replacement transaction for all resource types can be created and is no longer limited to only replacing the deficient MW quantity on the resource.

Once the Third Incremental for the Delivery Year has been conducted, resources in a less constrained area can be specified as replacement for resources in a more constrained area as long as there is remaining import capability. Sub-Annual resources in a more constrained area can replace Sub-Annual resources in a less constrained area if there is remaining room on the Maximum Constraints by Product Type.

To create a Replacement Capacity transaction, follow the steps below:

Select **Transactions → Capacity Transactions**

Right click the **Create Transactions** button.

Select **Replacement** from the drop down list.

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A pop-up window will open where the data necessary to create the Replacement Capacity transaction is entered. Enter the required data as described below.

Start Date: Enter the start date of the replacement transaction.

Stop Date: Enter the stop date of the replacement transaction.

Resource Being Replaced: Select the applicable resource name to be replaced from the drop down list. Only resources with an RPM Commitment are listed.

Committed Product Type: Select the appropriate Product Type of the commitment to be replaced from the drop down list.

Committed MOPR Type: Select the applicable MOPR Type from the drop down list. This field is applicable to 2022/2023 DY.

MW (UCAP): Enter the amount of RPM Commitment MW in UCAP terms to be transferred. Once the transaction is submitted, Capacity Exchange performs validation checks to (1) ensure the replacement resource or the LDA selected has enough Available UCAP for the dates selected and (2) ensure that the UCAP amount specified does not exceed the RPM Committed MW on the resource that is being replaced.

Replaced By: Click the **Resource** radio-button if you wish to use the available capacity on a specific resource as the source of replacement; or Click **LDA** radio-button if you wish to use available Cleared Buy Bids or Locational UCAP as the source of replacement.

If you clicked Resource radio-button:

Replacement Resource: Select the appropriate Resource name from the drop down list. Only resources with available MW for the dates selected are listed in the drop down list.

Replacement MOPR Type: Select the applicable MOPR Type from the drop down list. This field is applicable to 2022/2023 DY.

Retroactive for Performance Assessment Intervals: Click this box to indicate whether or not the transaction is a retroactive replacement due to a Performance Assessment Interval. This check box is not applicable when replacing by LDA type, since a retroactive replacement must be unit-specific.

If you clicked LDA radio-button:

LDA: Select the appropriate LDA name of the buy bid or Locational UCAP from the drop down list. Only LDAs with available MW for the dates selected are listed in the drop down list.

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Auction Type: Select the applicable Auction Type from the drop down list... NONAUCTION represents MWs obtained from Locational UCAP transactions.

Product Type: Select the applicable Product Type from the drop down list.

Add Comment: Enter any desired comment(s).

Click the **Save** button.

Verify the Replacement transaction is now in the "Approved" status. If the Retroactive for Performance Assessment Intervals check box was clicked, the Replacement transaction goes to "Pending PJM" for review.

If you need to edit or delete an approved Replacement transaction prior to the start date of the transaction, select Override from the **Apply Action** drop down list in the transaction window and the Replacement transaction will be reversed. You can then create a new Replacement transaction with updated data.

Click the **Close** button to close the Replacement transaction window and return to the Capacity Transactions secondary level menu.

Task 9: Create PRD Transfer Transaction

A PRD Provide may create a PRD Transfer transaction o transfer the obligation to provide price responsive demand (PRD) to another PRD Provider during the Delivery Year. To create a PRD Transfer transaction, follow the steps below:

Select **Transactions → Capacity Transactions**

Right click the **Create Transactions** button.

Select **PRD Transfer** from the drop down list.

A pop-up window opens where the data necessary to create a PRD Transfer transaction is entered. Enter the required data as described below.

Start Date: Enter the start date of the PRD Transfer transaction

Stop Date: Enter the stop date of the PRD Transfer transaction.

Seller: Defaults to the short name of the Company displayed in the Single User Multi Account (SUMA) company account drop down list.

Buyer: Select the name of the participant who is the Buyer of the transaction from the drop down list.

Commitment Type: Select either RPM or FRR from the drop down list.

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Subzone: Select the zone/subzonal location of the PRD from the drop down list.

MW (ICAP): Enter the amount of committed Nominal PRD Value in ICAP terms to transfer to the Buyer.

Add Comment: Enter any desired comment(s).

Click the **Save** button.

Verify the transaction is now in "Pending Buyer" status.

A PRD Transfer transaction created by the Seller needs to be approved by the Buyer in order for the transaction to be approved. A Buyer confirms or denies the transaction by selecting **Confirm** or **Approve** from the **Apply Action** drop down list.

Click the **Close** button to close the transaction pop-up window and to return to the **Capacity Transactions** secondary level menu.

Task 10: View Capacity Postings

Participants can view capacity postings created in Capacity Exchange to help facilitate bilateral transaction activity. To view capacity postings, follow the steps below:

Select **Transactions → Capacity Postings**

A list of all existing Capacity Postings is displayed in table format. The following columns are displayed and may be further filtered:

ID: The identification number of the posting.

Type: The type of the capacity posting. Buy indicates an interest in purchasing capacity from another party. Sell indicates an interest in selling capacity to another party.

Start Date: Start date of the capacity posting.

Stop Date: Stop date of the capacity posting.

Company: The short name of the company that created the capacity posting.

LDA: The applicable LDA for the capacity posting.

MW Amount: The MW amount of the capacity posting.

To view the details of a specific capacity posting, click on the desired capacity posting row to highlight the transaction. Right click on the highlighted capacity posting row and select **View**. A capacity posting pop up window appear with the details of the specific posting.

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Click the **Close** button to close the capacity pop-up window and return to the Capacity Postings secondary level menu.

Task 11: Create a Capacity Posting

Any participant can create a Capacity Posting indicating a request to buy or offer to sell capacity. To create a capacity posting, follow the steps below:

Select **Transactions → Capacity Postings**

Click the **Create Posting** button**.**

Select **Capacity Posting.**

A pop-up window opens where the data necessary to create the Capacity Posting is entered. Enter the required data as described below.

Posting Type: Select Buy or Sell from the drop down list. If you are interested in purchasing capacity from another party, select "Buy". If you are interested in selling capacity to another party select "Sell".

Start Date: Enter the start date that the capacity is either available to sell or requested to purchase.

Stop Date: Enter the stop date that the capacity is either available to sell or requested to purchase.

LDA: Enter the desired or appropriate LDA from the drop down list.

ICAP (MW): Enter the MW value of capacity in ICAP terms.

Email: The email address of the user based on user's email address in Account Manager.

Phone: The phone number of the user based on the user's phone number in Account Manager.

Add Comment: Enter any desired comment(s). Comments are optional and are visible to all parties who view the capacity posting.

Click the **Save** button.

Capacity Exchange does not automatically match buy and sell postings. All terms of the transaction need to be worked out offline, and after agreement, a bilateral transaction needs to be entered into Capacity Exchange and approved before the desired start date.

Click the Close button to close the capacity posting pop-up window and to return to the Capacity Postings secondary level menu.

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If you desire one of your existing Capacity Postings to be deleted, please email a request to delete a capacity posting to the RPM Hotline at rpm_hotline@pjm.com. Please provide the capacity posting identification number in the request.

Auctions

Auctions Overview

A Capacity Market Seller can participate in RPM Auctions through the Auctions area in Capacity Exchange. There are seven secondary level menus that can be selected from the **Auctions** primary level navigation:

Resource Confirmation: Allows a Capacity Market Seller to confirm the modeling of each capacity resource in their portfolio.

PRD Elections: Allows a PRD Provider to submit PRD Elections.

Demand Resource Setup: There are three tabs available from the Demand Resource Setup secondary level menu:

- **Pre-Registration Confirmation:** The Pre-Registration Confirmation tab is used to confirm the Curtailment Service Provider's existing DR Registrations that they reasonably intend to have under contract for the RPM Auction Delivery Year.
- **Resource Setup:** The Resource Setup tab is used to establish a Demand Resource's existing and planned available MWs for an RPM Auction.
- **Historical Data:** The Historical Data tab is used to view historical max registered and max cleared data for use in determining a Curtailment Service Provider's sell offer threshold in a Zone of Concern.

Energy Efficiency Setup: The Energy Efficiency Setup is used to establish an Energy Efficiency Resource's existing and planned available MWs for an RPM Auction.

Buy & Sell: There are four tabs available from the Buy & Sell secondary level menu:

- **Resource Offer:** The Resource Offer tab allows a Capacity Market Seller to submit a Sell Offer for a Generation Resource, Demand Resource, Energy Efficiency Resource, or an Aggregate Resource.
- **Capacity Bids:** The Capacity Bids tab allows a Capacity Market Buyer to submit a Buy Bid in an Incremental Auction.
- **Qualified Transmission Offers:** The Qualified Transmission Offers tab allows a QTU Provider to enter a sell offer for a transmission upgrade into a Base Residual Auction.

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- **Flexible Self Schedule Parameters:** The Flexible Self Schedule Parameters tab allows a Capacity Market Seller (who is also a Load Serving Entity) that is submitting flexible self-schedule segment(s) in their resource offer(s) to specify the percentage of the Preliminary Zonal Peak Load Forecast that they intend to cover with self-scheduled and flexible self-scheduled resources.

Auction Results: There are six tabs available from the Auction Results secondary level menu to view the clearing results of the following:

- Resource Offer Segments
- Resource Offers
- Capacity Bids
- PRD Elections
- Qualified Transmission Upgrade Offers
- Flexible Self Scheduling Offers

Task 1: Resource Confirmation

Prior to any RPM auction, RPM suppliers must confirm the modeling of each of their capacity resources. RPM suppliers must verify the following characteristics: Zone Assignment, LDA Assignment, Unit Location by State, Unit Type, Fuel Type, Product Type, CP Capability (2018/19 and 2019/20 DYs), and Seasonal Eligibility (2020/21 DY and forward). The confirmation window is open approximately three weeks prior to the opening of an Auction and closes when the Auction offer window closes. RPM suppliers must confirm the modeling of each resource before offers are accepted for the relevant RPM Auction.

Select **Auctions → Resource Confirmation**

Select the desired **Delivery Year** from the **Delivery Year** drop down list

Select the desired **Auction Type** from the **Auction Type** drop down list

Based on the filter criteria selected, a list of resources are displayed in a table format where the following columns are displayed, and can be further filtered.

Resource Name: Name of the Resource.

Resource Type: Type of Resource (i.e., GEN, DEMAND, EE, or AGG).

Aggregate Resource Name: Name of the Aggregate Resource. Aggregate Resources are effective starting with the 2018/2019 Delivery Year.

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Zone: zone in which resource is located.

LDA: LDA the resource is modeled in for the selected Delivery Year.

State: State in which the resource is located.

Unit Type: Unit type of the resource.

Fuel Type: Fuel type of the resource in accordance with NERC Fuel Code Definitions.

NERC Fuel Code Definitions:

Fuel Code	Definition
CC	Coal
DI	Distillate Oil (No.2)
GE	Geothermal
GG	Natural Gas
JP	JP4 or JP5
KE	Kerosene
LI	Lignite
NU	Nuclear
OG	Other Gas
OL	Other Liquid

Fuel Code	Definition
OO	Oil
OS	Other Solid
PE	Peat
PR	Propane
SL	Sludge Gas
SO	Solar
WA	Water
WD	Wood
WH	Waste Heat
WM	Wind

Product Type: Product Type of the resource (e.g., Annual, Base, Base DR/EE). The Product Type column appears starting 2018/2019 Delivery Year.

CP Eligible: Yes or No indicates whether the resource is eligible to take on a CP commitment. The CP Eligible column appears for 2018/2019 and 2019/2020 Delivery Years.

Seasonal Eligible: Yes or No indicates whether the resource is eligible to offer as a Seasonal Capacity Performance Resource. The Seasonal Eligible column appears effective with the 2020/2021 Delivery Year.

Confirmed: Yes or No indicates whether or not the characteristics of the resource have been confirmed.

To confirm a single resource in the table:

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Click on a resource row to highlight the specific resource row. Prior to confirmation, review the characteristics of the highlighted resource row for accuracy. Select **Yes** from the Confirmed drop down list box to confirm the characteristics of the highlighted resource. Click the **Save** button to submit the resource confirmation.

To confirm multiple resources in the table:

Use Ctrl or Ctrl Shift functionality to highlight multiple resource rows as desired. Right click and select **Confirm**. Click the **Save** button to submit the resource confirmation(s).

To confirm all resources in the table:

Ensure no resource rows in the table are highlighted by clicking the **Refresh** button. Right click anywhere in the table and select **Confirm All**. In the Confirmed column, all resources will display as Yes. Click the **Save** button to submit the resource confirmation(s).

If any of the information presented for a resource is incorrect, contact the RPM Hotline at rpm_hotline@pjm.com in order to have the information corrected.

Once a resource is confirmed and saved for a particular RPM Auction, the confirmation cannot be unconfirmed through the screen. If a resource needs to be unconfirmed, contact the RPM Hotline.

Task 2: State Subsidy Certification

Applicable only for the 2022/2023 Delivery Year, Capacity Market Sellers must certify whether or not their Generation Capacity Resource is a State Subsidized resource and whether they elect the Competitive Exemption and forgo any subsidies.

Select **Auctions → State Subsidy Certification**

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

Based on the filter criteria selected, a list of generation resources will be displayed. Resource with Non-Exempt Existing or Non-Exempt New MW are required to complete the certification using the following data fields:

Self-Supply LSE: Indicates whether the account is a Self-Supply Entity.

Resource Name: Name of the Resource.

Categorical Exemption MW: The resource megawatts that qualify for one of the categorical exemptions in the order, and therefore, are not subject to a minimum floor price in the RPM auctions, regardless of state subsidies.

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Non-Exempt Existing MW: The resource megawatts that do not qualify for an exemption and have previously cleared in an RPM auction. For Capacity Resources with State Subsidy, these megawatts will be subject to a minimum floor price at Net ACR.

Non-Exempt New MW: The resource megawatts that do not qualify for an exemption and have yet to clear in an RPM auction. For Capacity Resources with State Subsidy, these megawatts that will be subject to a minimum floor price at Net CONE.

Capacity Resource with State Subsidy: Capacity Market Sellers certify whether or not the resource is a Capacity Resource with State Subsidy.

State Subsidy Identification: Resources that elect "Yes" to Capacity Resource with State Subsidy need to specify the subsidies they are entitled to or are receiving. Common nomenclature can be used here (e.g. RECS), otherwise, the applicable state legislation can be submitted.

Competitive Exemption: A Capacity Resource with State Subsidy can certify whether or not they will forgo the subsidy.

Subject to 5.14(h-1) MOPR (State Subsidy MOPR): Indicates whether or not the resource is subject to MOPR as described in the PJM Tariff attachment DD Section 5.14 (h-1).

Subject to 5.14(h) MOPR (New Entry MOPR): Indicates (after submission) whether or not the resource is subject to MOPR as described in the PJM Tariff attachment DD Section 5.14 (h).

Click the **Save** button to submit the State Subsidy certification.

Task 3: Generation MOPR Certification

Starting with the 2023/2024 Delivery Year, Capacity Market Sellers must certify whether or not their Generation Capacity Resource is receiving or expected to receive Conditioned State Support under any legislative or other governmental policy or program that is effective at the time of this certification. Capacity Market Sellers must also certify whether or not they intend to exercise Buyer Side Market Power. Any resources that do not certify by the deadline to both the Conditioned State Support and to Not Exercise Buyer Side Market Power will be subject to MOPR.

Select **Auctions → Generation MOPR Certification**

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

Based on the filter criteria selected, a list of generation resources will be displayed, along with a counter to identify how many have been certified to both Conditioned State Support and to Not Exercise Buyer Side Market Power.

Resource Name: Name of the Resource.

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Certification of Conditioned State Support: Capacity Market Sellers certify whether or not the Generation Capacity Resource is receiving or expected to receive Conditioned State Support under any legislative or other governmental policy or program that is effective at the time of this certification.

Certification To Not Exercise Buyer Side Market Power: Capacity Market Sellers certify whether or not it does not intend to Exercise Buyer-Side Market Power for this Generation Capacity Resource.

Subject to 5.14(h-2) MOPR: Indicates (after submission) whether or not the resource is subject to MOPR as described in the PJM Tariff attachment DD Section 5.14 (h-2).

Click the **Save** button to submit the Generation MOPR Certification

To make elections for all resources in the table at once:

Ensure no resource rows in the table are highlighted by clicking the **Refresh** button. **Right click** anywhere in the table and select the appropriate election. Once selected, the election will show under the applicable column for review. After review, click the **Save** button to submit the registration confirmations.

Task 4: Enter PRD Elections

PRD Providers can enter PRD Elections in the Base Residual Auction and Third Incremental Auction starting with the 2016/2017 Delivery Year. PRD Providers submit their PRD Elections by zone/sub-zone. PRD Elections are reviewed by PJM prior to being approved.

Select **Auctions → PRD Elections**

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

Select the desired Zone/Subzone from **Zone/Subzone** drop down list

Based on the filter criteria selected, ten PRD Election segments are displayed for the specified zone/subzone. Enter PRD Election segment data for a desired number of segments using the following data fields:

- **Min MW** – Minimum amount of Nominal PRD Value (in ICAP terms) specified for a segment. A segment can clear anywhere from the minimum MW to the maximum MW amount specified.
- **Max MW** – Maximum amount of Nominal PRD Value (in ICAP terms) specified for a segment.
- **Reservation Price** – The reservation price in $/MW-day for the segment.

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Click the **Save** button to submit the PRD Election.

Once the deadline for submitting PRD Elections for the RPM Auction has passed, PJM reviews the PRD Elections. If approved, the PRD Election will be considered in the RPM Auction clearing. If denied, the PRD Provider may adjust their PRD Elections and re-submit; however, this may only be done during PRD Election review period.

Task 5: DR Pre-registration Confirmation

Prior to each RPM Auction, Curtailment Service Providers (CSPs) are provided a list of existing DR Hub registrations for which they must individually confirm that they plan to have a contract with the associated end-use customer(s) for the Delivery Year of the RPM Auction. The confirmations must be done during the DR pre-registration window. The summation of the selected sites forms the basis of the CSP's Existing DR to offer in the relevant RPM Auction.

Select **Auctions → Demand Resource Setup**

Select **Pre-Registration Confirmation** tab

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

Based on the filter criteria selected, a list of registrations is displayed in a table format where they can be reviewed and confirmed. The following data columns are displayed in the table and may be further filtered:

Registration ID: Registration ID of the DR Hub registration.

Registration Name: Name of the registration.

Zone: Zone where the registration is located.

LDA: Locational Deliverability Area where the registration is located.

MOPR Type: Distinguishes the applicable MOPR (Exempt, Existing or New) for the Nominated MW. This column is displayed for 2022/2023 Delivery Year.

Type: Identifies whether the Nominated MW is supported by load reduction or generation backed. If generation backed, then the applicable technology type will be displayed. This column is displayed for 2022/2023 Delivery Year.

MW: The nominated value of the registration.

Capacity Resource with State Subsidy: Capacity Market Sellers certify whether or not the registration is a Capacity Resource with State Subsidy. This column is only applicable to the 2022/2023 Delivery Year.

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State Subsidy Identification: Resources that elect "Yes" to Capacity Resource with State Subsidy need to specify the subsidies they are entitled to or are receiving. Common nomenclature can be used here (e.g. RECS), otherwise, the applicable state legislation can be submitted. This column is only applicable to 2022/2023 Delivery Year.

Competitive Exemption: A Capacity Resource with State Subsidy can certify whether or not they will forgo the subsidy. This column is only applicable to 2022/2023 Delivery Year.

Subject to 5.14(h-1) MOPR (State Subsidy MOPR): Indicates whether or not the registration is subject to MOPR as described in the PJM Tariff attachment DD Section 5.14 (h-1). This column is only applicable to 2022/2023 Delivery Year.

Resource Name: The Capacity Resource that the registration will be offered on. This column is displayed only for the 2022/2023 Delivery Year.

Confirmed: Yes or No indicates whether the registration has been confirmed.

To confirm a single registration in the table:

Click on a registration row to highlight the specific registration row. Select **Yes** from the Confirmed drop down list box if you plan to have a contract with the associated end-use customer(s) of the registration for the Delivery Year applicable to the RPM Auction. Click the **Save** button to submit the registration confirmation.

To confirm multiple registrations in the table:

Use Ctrl or Ctrl Shift functionality to highlight multiple registration rows as desired. Right click and select **Confirm**. Click the **Save** button to submit the registration confirmations for the highlighted registrations.

To confirm all registrations in the table:

Ensure no registration rows in the table are highlighted by clicking the **Refresh** button. Right click anywhere in the table and select **Confirm All**. In the Confirmed column, all registrations will display as Yes. Click the **Save** button to submit the registration confirmations.

Task 6: DR State Subsidy Certification

Applicable only to the 2022/2023 Delivery Year, CSPs must certify whether or not their Demand Response Capacity Resource is a State Subsidized resource and whether they elect the Competitive Exemption and forgo any subsidies.

Select **Auctions → Demand Resource Setup → Resource Certification**

Select the desired Delivery Year from **Delivery Year** drop down list

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Select the desired Auction Type from **Auction Type** drop down list

Based on the filter criteria selected, a list of demand resources will be displayed along with the following data fields:

Self-Supply LSE: Indicates whether the account is a Self-Supply Entity.

Resource Name: Name of the Resource.

Zone: Zone where the resource is located.

LDA: Locational Deliverability Area where the resource is located.

Capacity Resource with State Subsidy: Capacity Market Sellers certify whether or not the resource is a Capacity Resource with State Subsidy.

State Subsidy Identification: Resources that elect "Yes" to Capacity Resource with State Subsidy need to specify the subsidies they are entitled to or are receiving. Common nomenclature can be used here (e.g. RECS), otherwise, the applicable state legislation can be submitted.

Competitive Exemption: A Capacity Resource with State Subsidy can certify whether or not they will forgo the subsidy.

Subject to 5.14(h-1) MOPR (State Subsidy MOPR): Indicates whether or not the resource is subject to MOPR as described in the PJM Tariff attachment DD Section 5.14 (h-1).

Click the **Save** button to submit the State Subsidy certification.

Task 7: Setup Demand Resource

Curtailment Service Providers (CSPs) that completed the DR Pre-registration Confirmation may have Existing DR to offer in the RPM Auction. If the summation of the selected sites in pre-registration confirmation for a particular zone/LDA exceeds the DR commitments for the CSP in that zone/LDA, the CSP may offer the excess MW as Existing DR. CSPs that wish to offer Planned DR in the RPM Auction must submit their planned MW by zone/LDA. Once PJM has reviewed the planned MW and given approval, CSPs can then allocate the approved planned MW to their modeled Demand Resource(s) to offer such Demand Resource(s) in the RPM Auction. This allocation process is done on the Resource Setup screen by allocating the Existing Available MW or Approved Planned MW in the zone/LDA to modeled Demand Resource(s) in the zone/LDA.

The Existing and Planned DR setup for a Demand Resource must be done during the DR Setup window for the RPM Auction. To set up your DR Resource, follow the steps below.

Select **Auctions → Demand Resource Setup**

Select **Resource Setup** tab

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Select the desired **Delivery Year** from **Delivery Year** drop down list

Select the desired **Auction Type** from **Auction Type** drop down list

A list of zone/ LDAs are displayed in table format, along with all modeled Demand Resources in the zone/LDA for the specified RPM Auction. The following data columns are displayed in the table and can be further filtered.

Zone: Transmission zone applicable to the modeled Demand Resource.

LDA: Modeled LDA applicable to the modeled Demand Resource.

Pre-Registration Existing MW: Sum of the nominated value of the registrations confirmed during the Pre-Registration Confirmation process.

Committed MW: Sum of all DR commitments (in ICAP terms) in the zone/LDA for the Delivery Year.

Existing Available MW: This value equals the Pre-Registration Existing MW minus Committed MW. This represents the maximum MW of existing DR in the zone/LDA that can be allocated to modeled Demand Resources in the zone/LDA.

Planned MW: Planned MW amount submitted by the CSP in the DR Sell Offer Plan.

Approved Planned MW: Planned MW amount approved by PJM.

Credit Posted: **Yes** indicates credit has been posted with PJM Treasury for approved Planned MW. **No** indicates credit has not been posted with PJM Treasury for approved Planned MW. This column is displayed starting with the 2020/2021 Delivery Year.

Resource: Name of modeled Demand Resource(s) in the zone/LDA.

CP Capable: Yes or No indicates whether or not the Demand Resource is eligible to be offered as Capacity Performance. The column is effective for the 2018/19 and 2019/2020 Delivery Years.

Existing MW to Offer: For a specific Demand Resource, the portion of Existing Available MW in zone/LDA allocated to such Demand Resource. This column is not displayed starting with 2020/2021 Delivery Years.

Planned MW to Offer: For a specific Demand Resource, the potion of the Approved Planned MWs in zone/LDA allocated to such Demand Resource. This column is not displayed starting with 2020/2021 Delivery Years.

Existing MW to Offer Annual: For a specific Demand Resource, the portion of the Existing Available MWs in zone/LDA allocated to offer as annual Capacity Performance for such Demand Resource. This column displays starting with the 2020/2021 Delivery Year.

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Existing MW to Offer Summer: For a specific Demand Resource, the portion of the Existing Available MWs in zone/LDA allocated to offer as Summer-Period Capacity Performance for such Demand Resource. This column displays starting with the 2020/2021 Delivery Year.

Planned MW to Offer Annual: For a specific Demand Resource, the portion of Approved Planned MWs in zone/LDA allocated to offer as annual Capacity Performance for such Demand Resource. This column displays starting with the 2020/2021 Delivery Years.

Planned MW to Offer Summer: For a specific Demand Resource, the portion of Approved Planned MWs in zone/LDA allocated to offer as Summer-Period Capacity Performance for such Demand Resource. This column displays starting with the 2020/2021 Delivery Years.

Credit Requirement: The amount of credit required on the respective Demand Resource based on the Planned MW to Offer and the pre-auction credit rate. This column is not displayed for the 2018/2019 and 2019/2020 Deliver Years.

If the Existing Available MW in a zone/LDA is greater than zero, a CSP may allocate those MWs to the modeled Demand Resource(s) in such zone/LDA by clicking on the row of the desired resource and entering the desired allocated MW amount in the applicable Existing MW to Offer field(s).

Once an Approved Planned MW amount in a zone/LDA has been entered by PJM, a CSP may allocate those MWs to modeled Demand Resource (s) by clicking on the row of the desired resource and entering the desired allocated MW amount in the applicable Planned MW to Offer field(s).

When you have finished allocating the Existing Available MW or Approved Planned MW to your modeled Demand Resources, click the **Save** button to save your allocations.

Task 8: View DR Historical Data

Historical Data tab displays the max registered MW and max cleared MW for the zones/sub-zonal LDAs that are deemed as Zones of Concern for the Delivery Year. The information displayed on this screen is used to determine the CSP Sell Offer Threshold in a Zone of Concern and is used in the development of a CSP's DR Sell Offer Plan.

Select **Auctions → Demand Resource Setup**

Select **Historical Data** tab

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

Based on the filter criteria selected, a list of modeled zone/sub-zones deemed as Zone of Concern for the Delivery Year are displayed in a table format. The following data columns are displayed and may be further filtered:

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Zone: Zone name of the Zone of Concern.

LDA: Modeled LDA applicable to the Zone of Concern.

Max Registered (MW): The max MW a CSP has registered in the previous three Delivery Years at the time of the Base Residual Auction.

Max Cleared (MW): The max MW a CSP has cleared in the previous three Base Residual Auctions at the time of the Delivery Year Base Residual Auction.

Higher of Max Registered or Cleared (MW): Displays a value that is the higher of the Max Registered MW or Max Cleared MW.

Task 9: EE State Subsidy Certification

Applicable only to 2022/2023 Delivery Year, CSPs must certify whether or not their Demand Response Capacity Resource is a State Subsidized resource and whether they elect the Competitive Exemption and forgo any subsidies.

Select **Auctions → Energy Efficiency Setup → Resource Certification**

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

Based on the filter criteria selected, a list of energy efficiency resources will be displayed along with the following data fields:

Self-Supply LSE: Indicates whether the account is a Self-Supply Entity.

Resource Name: Name of the Resource.

Zone: Zone where the resource is located.

LDA: Locational Deliverability Area where the resource is located.

Installation Period: Installation period of the EE projects that constitute the EE Resource.

Capacity Resource with State Subsidy: Capacity Market Sellers certify whether or not the resource is a Capacity Resource with State Subsidy.

State Subsidy Identification: Resources that elect "Yes" to Capacity Resource with State Subsidy need to specify the subsidies they are entitled to or are receiving. Common nomenclature can be used here (e.g. RECS), otherwise, the applicable state legislation can be submitted.

Competitive Exemption: A Capacity Resource with State Subsidy can certify whether or not they will forgo the subsidy.

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Subject to 5.14(h-1) MOPR (State Subsidy MOPR): Indicates whether or not the resource is subject to MOPR as described in the PJM Tariff attachment DD Section 5.14 (h-1).

Click the **Save** button to submit the State Subsidy certification.

Task 10: Setup Energy Efficiency

EE Providers that submitted a Delivery Year Post Installation Measurement & Verification (PI M&V) report may have Existing EE to offer in the RPM Auction. If the summation of the Nominated EE Value of approved projects for a particular zone/LDA and installation period exceeds the EE commitments in that zone/LDA, the excess MW can be offered as Existing EE.

Participants that wish to offer Planned EE into the RPM Auction must submit their planned MW (based on Nominated EE Value) for a zone/LDA in Capacity Exchange, along with submitting an EE Measurement & Verification Plan for the relevant RPM to the rpm_hotline@pjm.com. Once PJM has reviewed the M&V Plan for the RPM Auction and approved the planned MW in Capacity Exchange, participants can then allocate the Approved Planned MW in zone/LDA to their modeled Energy Efficiency resource(s) in the zone/LDA to offer the Energy Efficiency Resource(s) in the RPM Auction. This allocation is done in the Energy Efficiency Setup screen.

The Existing and Planned EE setup for your Energy Efficiency resources must be completed during the EE Setup window for the RPM Auction. To set up your Energy Efficiency (EE) Resource, follow the steps below.

Select **Auctions → Energy Efficiency Setup**

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

A list of zone/LDAs are displayed in table format, along with all modeled Energy Resources in the zone/ LDA for the specified RPM Auction. The following data columns are displayed in the table and can be further filtered.

Zone: Transmission zone applicable to the EE Resource.

LDA: The LDA applicable to the EE Resource.

Installation Period: Installation period of the EE projects that constitute the EE Resource.

Post-Installation Existing MW: The PJM approved Nominated EE Value (in ICAP terms) by zone/LDA and installation period based on the latest PI M&V report. The Post-Installation Existing MW for a zone/LDA and installation period may be lower than the PJM approved Nominated EE Value due to the commitments on other installation period EE Resources in the zone/LDA.

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Committed MW: Sum of all EE commitments by zone/LDA and installation period for the Delivery Year.

Existing Available MW: Post-Installation Existing MW minus Committed MW for the zone/LDA and installation period.

Planned MW: Planned MW amount for the zone/LDA and installation period submitted by the participant.

Approved Planned MW: Planned MW amount for the zone/LDA and installation period approved by PJM.

Credit Posted: **Yes** indicates credit has been posted with PJM Treasury for approved Planned MW. **No** indicates credit has not been posted with PJM Treasury for approved Planned MW. This column is displayed starting with the 2020/2021 Delivery Year.

Resource: Name of the modeled installation period EE Resource(s) in the zone/LDA.

CP Capable: Yes or No indicates whether or not the EE Resource is eligible to be offered as Capacity Performance. The column is effective for the 2018/19 and 2019/2020 Delivery Years.

Existing MW to Offer: For a specific EE Resource, the portion of the Existing Available MW in zone/LDA and installation period allocated to such EE Resource. This column is not displayed starting with 2020/2021 Delivery Years.

Planned MW to Offer: For a specific EE Resource, the potion of the Approved Planned MW in zone/LDA and installation period allocated to such EE Resource. This column is not displayed starting with 2020/2021 Delivery Years.

Existing MW to Offer Annual: For a specific EE Resource, the portion of the Existing Available MWs in zone/LDA and installation period allocated to offer as annual Capacity Performance for such EE Resource. This column displays starting with the 2020/2021 Delivery Year.

Existing MW to Offer Summer: For a specific EE Resource, the portion of the Existing Available MWs in zone/LDA and installation period allocated to offer as Summer-Period Capacity Performance for such EE Resource. This column displays starting with the 2020/2021 Delivery Year.

Planned MW to Offer Annual: For a specific EE Resource, the portion of Approved Planned MWs in zone/LDA and installation period allocated to offer as annual Capacity Performance for such EE Resource. This column displays starting with the 2020/2021 Delivery Years.

Planned MW to Offer Summer: For a specific EE Resource, the portion of Approved Planned MWs in zone/LDA and installation period allocated to offer as Summer-Period Capacity Performance for such EE Resource. This column displays starting with the 2020/2021 Delivery Years.

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Credit Requirement: The amount of credit required on the respective EE Resource based on the Planned MW to Offer and the pre-auction credit rate. This column is not displayed for the 2018/19 and 2019/20 DYs.

If the Existing Available MW for a zone/LDA and installation period is greater than zero, you may allocate those MW to the modeled EE Resource(s) in the zone/LDA and installation period by clicking on the resource row and entering the desired allocated MW amount in the applicable Existing MW to Offer field(s).

Once an Approved Planned MW amount in zone/LDA and installation period has been entered by PJM, an EE Provider may allocate those MWs to modeled Energy Efficiency Resource(s) by clicking on the resource row and entering the desired allocated MW amount in the applicable Planned MW to Offer field(s).

When you have finished allocating the Existing Available MW or Approved Planned MW to your modeled Energy Efficiency Resources, click the **Save** button to save your allocations.

Task 11: Enter Resource Offer

In order to submit sell offers into an RPM Auction, an individual resource-specific sell offer needs to be entered for each resource on the Resource Offers Screen. A sell offer can only be submitted for Resource in which the participant has the capacity rights to the Resource for the entire Delivery Year. Sell Offers can only be submitted when the auction offer window is open. Prior to submitting a Sell Offer for a Resource, the Resource Provide must confirm the characteristics of such resource on the Resource Confirmation Screen (see Task 1 under the Auctions heading). To submit a Sell Offer, follow the steps below:

Select **Auctions → Buy & Sell**

Select **Resource Offers** tab

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

Select the desired Resource Type from **Resource Type** drop down list.

Select the desired Resource from **Resource** drop down list (The list includes Generation, Demand, Energy Efficiency, or Aggregate Resources, depending on Resource Type selected, that have available capacity to be entered into Delivery Year RPM Auction selected.)

Based on the filter criteria selected, the following tables are displayed for the Capacity Market Seller to submit a sell offer for the selected Resource:

Characteristics Table

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Resource Type: The resource type of the selected resource.

EFORd: The Equivalent Demand Forced Outage Rate (EFORd) to apply to the offered MWs. A Capacity Market Seller may enter a value less than or equal to the Maximum Offer EFORd displayed in the Characteristics Table. The generation resource's final EFOR**d** for the Delivery Year is used in the Delivery Year Third Incremental Auction.

Maximum Offer EFORd: The maximum allowable EFORd that can be used in an RPM Auction for a generation resource. The Maximum Offer EFORd is computed as the maximum of the EFORd at the BRA, EFORd-5 at the BRA, and BRA Sell Offer EFORd. PJM's Market Monitor must approve the use of an alternative Max Offer EFORd from the value computed.

New Unit Pricing: The New Unit Pricing checkbox is checked if the planned generation resource qualifies for the New Entry Pricing Adjustment and the Capacity Market Seller seeks the New Entry Pricing Adjustment option. See Manual 18 for business rules applicable to the New Entry Pricing Adjustment.

Competitive Exemption: Identifies whether the selected resource has elected the competitive exemption. This field is applicable only to 2022/2023 Delivery Year.

Existing MOPR Price: The applicable MOPR Price to available MW will be subject to "Existing" MOPR Price.

New MOPR Price: The applicable MOPR Price to available MW will be subject to "New" MOPR Price.

Existing MOPR MW: The applicable available MW will be subject to "Existing" MOPR Price.

New MOPR MW: The applicable available MW will be subject to "New" MOPR Price.

MPCE: A Capacity Market Seller that submits a planned Resource may submit a Credit Limited Offer by entering a maximum post-auction credit exposure (MPCE) in dollars that the Capacity Market Seller is willing to accept for the sell offer. This dollar amount is used by the RPM clearing engine to limit the amount of capacity cleared on the sell offer and ensure the post-auction collateral requirement does not exceed the specified MPCE. An MPCE should not be specified for existing resources, planned resources that are offering Capacity Performance offer segments, or coupled resource offers. This field is no longer displayed starting with the 2020/2021 Delivery Year.

Available ICAP Table

Available ICAP is the amount of ICAP MWs available to be offered into the RPM Auction.

- The Minimum, Maximum, and Current Available ICAP are displayed in the Available ICAP Table for generation resources. (The Minimum, Maximum, and Current Available ICAP will be equal at the time of the Base Residual Auction.) See Manual 18 for the

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calculations of Minimum, Maximum, and Current Available ICAP for the Base Residual Auction and Incremental Auctions.

- The Existing, Planned, and Total Available ICAP are displayed in the Available ICAP Table for a Demand Resource or an EE Resource. For 2022/2023 DY this will also be displayed by MOPR Type.
- Prior to the 2020/2021 DY, the Available ICAP Table displays the Annual Available ICAP.
- Starting with the 2020/2021 DY, the Available ICAP Table displays the Available ICAP that may be offered into the RPM Auction by season (Annual, Summer, and Winter).
- For 2022/2023 DY, the Available ICAP Table displays the Available ICAP that may be offered into the RPM Auction by MOPR Type (Exempt, Existing, and New).
- For 2022/2023 DY, the Available ICAP Table displays for generation resources the Existing, and New MOPR price applicable to the resource.

Offer Segment Data Table

There are 10 available segments to enter offer segment data. Offer segments do not need to be entered in ascending order. The sum of the Max MW amounts in each segment cannot exceed the Max Available ICAP displayed on the screen. For the 2018/19 and 2019/20 Delivery Years, resources that are eligible to submit CP sell offers will have 10 available segments to offer for both the CP and Base product types. A coupled sell offer segment is submitted by entering CP and Base product offer data under the same segment ID, and the RPM clearing engine will clear only one of the products in the offer segment. Effective with the 2020/21 Deliver Year, Seasonal Capacity Performance Resources will have an additional 10 seasonal segments to enter offer segment data for a summer or winter season. The sum of the Max MW amounts in the Annual segments cannot exceed the Annual Max Available ICAP on the resource. The sum of the Max MW amounts in the Annual and Seasonal segments cannot exceed the relevant season's Max Available ICAP on the resource.

Each segment has the following data fields:

- **ID:** Segment ID of the sell offer segment.
- **MOPR Type:** Enter the MOPR Type offered into the auction. This field is applicable only to 2022/2023 Delivery Year.
- **Min MW:** Enter the minimum amount of installed capacity offered for a segment. Seasonal sell offer segments do not specify a Minimum MW. This column is not displayed for the 2018/2019 and 2019/2020 Delivery Years.

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- **Max MW:** Enter the maximum amount of installed capacity offered for a segment. This column is not displayed for the 2018/2019 and 2019/2020 Delivery Years.

- **Price:** Enter the segment offer price in $/MW day (in UCAP terms). This column is not displayed for the 2018/2019 and 2019/2020 Delivery Years.

- **Capacity Performance Minimum MW:** Enter the minimum amount of installed capacity offered as Capacity Performance for a segment. This column is displayed for the 2018/2019 and 2019/2020 Delivery Years.

- **Capacity Performance Maximum MW:** Enter the maximum amount of installed capacity offered as Capacity Performance for a segment. *This column is displayed for the 2018/2019 and 2019/2020 Delivery Years.

- **Capacity Performance Price:** Enter the segment offer price in $/MW day (in UCAP terms) for Capacity Performance product type segment. This column is displayed for the 2018/2019 and 2019/2020 Delivery Years.

- **Base Minimum MW:** Enter the minimum amount of installed capacity offered as Base for a segment. This column is displayed for the 2018/2019 and 2019/2020 Delivery Years.

- **Base Maximum MW:** Enter the maximum amount of installed capacity offered as Base for a segment. This column is displayed for the 2018/2019 and 2019/2020 Delivery Years.

- **Base Price:** Enter the segment offer price in $/MW day (in UCAP terms) for Base product type segment. This column is displayed for the 2018/2019 and 2019/2020 Delivery Years.

- **Scheduling Option:** Select Self Schedule, Flexible Self Schedule, or Regular Schedule option for the segment from the drop down list.

  Self Schedule: Self-Scheduling allows a Capacity Market Seller (who is also an LSE) to hedge their Locational Reliability Charges by designating a resource as self-scheduled to cover their obligation in the Base Residual Auction. Self-Scheduling is available in the BRA only. If the self-schedule option is selected:

  - The sell offer segment price will be set to zero.

  - The minimum and maximum amounts specified in the sell offer segment must be equal.

  Flexible Self-Schedule: Flexible Self-Scheduling allows a Capacity Market Seller (who is also an LSE) with self-supply to manage the quantity uncertainty related to the Variable Resource Requirement and a LSE's capacity obligation. Flexible Self-Scheduling is only available in the Base Residual Auction. If the Flexible Self-Schedule option is selected:

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- The sell offer segment must specify a segment offer price that will be utilized in the market clearing in the event that MWs from sell offer segment are not needed to cover the LSE's calculated capacity obligation.

- A Capacity Market Seller must also submit, through the Flexible Self-Schedule Parameter tab, the percentage of the Preliminary Zonal Peak Load Forecast in each transmission zone, the LSE wishes to cover with self-scheduled and flexible self-scheduled resources.

- The flexible self-schedule segment will be automatically cleared in the RPM Auction if it is needed to supply the LSE's resulting capacity obligation.

- In the event that the LSE does not need all of the MWs in the segment that were specified as flexible self-schedule to meet its resulting capacity obligation, the RPM clearing function will consider the excess as offered into the market at the segment offer price.

- The segments that are considered excess for the LSE will be the segments that have the highest specified offer prices.

Regular Schedule: Regular scheduling allows a Capacity Market Seller to offer an offer segment without the special constraints that the Self-Schedule and Flexible Self Schedule options impose. Regular Scheduling is available in all RPM Auctions. If Regular Scheduling is selected:

- The minimum amount can be as low as 0 MW.

- The maximum amount can be as high as the maximum Available ICAP

- The price can be any price less than $1000.

- **Self Supply**: Select Yes or No to indicate whether or not the offer segment is designated as self-supply. The purpose of the self-supply designation is, when desired, to prevent PJM Settlement from being the counterparty for the designated supply. For example, rural electric cooperatives that must comply with limits on non-member income in order to retain their tax exempt status may wish to utilize this designation.

When the required resource offer data has been entered, click the **Save** button to save the resource sell offer.

Resource offers can only be entered and updated for an RPM Auction during the auction's offer window specified in the Auction schedule posted on the PJM website.

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Task 12: Enter Capacity Buy Bid into an Incremental Auction

Capacity Market Buyers can enter Capacity Buy Bids into RPM Incremental Auctions. A cleared Buy Bid in an Incremental Auction can be used as Replacement Capacity. In order to enter a Buy Bid into and Incremental Auction, a buy bid needs to be entered by LDA and Product Type on the Capacity Bids screen. Buy Bids can be submitted for any LDA modeled for the given Delivery Year, not just the LDAs where the Capacity Market Buyer has a position. To enter a Capacity Buy Bid, follow the steps below.

Select **Auctions → Buy & Sell**

Select **Capacity Bids** tab

Select the desired Delivery Year from **Delivery Year** drop down list.

Select the desired Auction Type from **Auction Type** drop down list.

Select the desired LDA from **LDA** drop down list.

Based on the filter criteria selected, ten bid segments are displayed for each product type of the Delivery Year for selected LDA:

Bid Segments: For each product type, there are 10 available segments to enter buy bid data. A Market Buyer can enter their buy bid using the following data fields.

- **Id** – Segment ID of the Buy Bid segment.
- **MW** – Enter the maximum amount of unforced capacity to buy in the segment. This value should be specified in UCAP terms. A segment can clear anywhere from zero to the maximum MW amount specified.
- **Price** – Enter the buy bid price in $/MW day (in UCAP terms). Enter the highest price the Market Buyer is willing to pay.

When the buy bid for the LDA/product type has been entered, click the **Save** button to save your buy bid.

Task 13: Enter Transmission Offer

A Sell Offer for a Qualified Transmission Upgrade can be entered in a Base Residual Auction. Sell Offers can only be submitted when the Base Residual Auction offer window is open.

Select **Auctions → Buy & Sell**

Select **Qualified Transmission Offers** tab

Select the desired Delivery Year from **Delivery Year** drop down list

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Select the desired Transmission Upgrade from **Transmission Upgrade** drop down list

Based on the filter criteria selected, ten offer segments are displayed for the selected Transmission Upgrade:

Each segment has the following data field:

- **Id** – Segment ID for the Transmission Offer.
- **Min MW** – Enter the Minimum MW amount to offer for the segment. Segments can clear anywhere from the minimum MW to the maximum MW amount specified.
- **Max MW** – Enter the Maximum MW amount to offer for the segment.
- **Price** – Enter the Sell Offer Price in $/MW day for the segment.
- **Scheduling Option** – Select Self Schedule or Regular Schedule for the segment from the drop down list.

When the Transmission Offer data for the selected Transmission Upgrade has been entered, click the **Save** button to save the transmission sell offer.

Task 14: Enter Flexible Self-Schedule Parameters

A Capacity Market Seller that selected the Flexible Self-Schedule option in a Base Residual Auction sell offer must specify Flexible Self-Schedule Parameters. Flexible Self-Schedule Parameters indicate the percentage of unforced capacity obligation that a Capacity Market Seller wishes to cover in the zone by self-scheduled and flexible self-scheduled capacity resources. To enter Flexible Self-Schedule Parameters, follow the steps below.

Select **Auctions → Buy & Sell**

Select **Flexible Self Schedule Parameters** tab

Select the desired Delivery Year from **Delivery Year** drop down list

For the Delivery Year selected, the following data columns are displayed for each transmission zone.

Zone: Select the transmission zone(s) where the Market Seller (who is also a LSE) serves load in the Delivery Year.

Self-Scheduling Factor: Enter the percentage of zonal unforced capacity obligation that the Capacity Market Seller wishes to cover in the zone by the Capacity Market Seller's self-scheduled and flexible self-scheduled resources. All flexible self-scheduled resources offered in excess of the percentage nominated will be entered into the market

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at the offer price(s) specified in the flexible self-scheduled offer(s) unless they are subject to mitigation.

When Self-Scheduling Factor(s) for the desired zone(s) have been entered, click the **Save** button to save the Flexible Self-Schedule Parameters.

Task 15: View Resource Offers Segment Result

Individual resource offer segment results for an RPM Auction can be viewed on the Resource Offer Segment Results Screen. To view the results of a Resource Offer Segment, follow the steps below:

Select **Auctions → Auction Results**

Select **Resource Offer Segments** tab

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

For the Delivery Year RPM Auction selected, the following data columns are displayed for each resource offer segment in the Capacity Market Seller's account and may be further filtered:

Resource: Name of the resource that was offered into the RPM Auction.

Resource Type: Type of the resource that was offered into the RPM Auction (GEN, DR, EE, or AGG).

Product Type: Product type of the resource sell offer segment.

Season: Season of the resource sell offer segment. This column is effective with the 2020/2021 Delivery Year.

MOPR Type: MOPR Type of the resource sell offer segment. This column is effective with the 2022/2023 Delivery Year.

Segment Name: Segment number applicable to the sell offer segment (1-10).

Scheduling Option: The scheduling option for the sell offer segment (Self-Schedule, Flexible Self-Schedule, or Regular).

Max MW: Maximum MW amount of unforced capacity submitted in the sell offer segment.

Min MW: Minimum MW amount of unforced capacity submitted in the sell offer segment.

Offer Price: Offer price submitted for the sell offer segment.

Offer Cap: Offer Cap for the sell offer segment.

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Clearing Price: Resource Clearing Price ($/MW-day) applicable to the Cleared MWs in the sell offer segment.

Mitigated: Yes or No indicates whether or not the sell offer segment was mitigated.

Cleared MW: Amount of unforced capacity MW cleared in the RPM Auction. This value does not include make-whole MW and will be less than or equal to the max value entered in the sell offer segment.

Makewhole MW: Amount of unforced capacity MW cleared as make-whole MWs in the sell offer segment. This value represents the difference in the Minimum MW submitted and the Cleared MW amount in the sell offer segment.

Adjusted RCP: If an adjusted Resource Clearing Price applies to the sell offer segment, an Adjusted Resource Clearing ($/MW-day) is displayed.

Task 16: View Resource Offer Results

A summary of the RPM Auction results for a Capacity Market Seller can be viewed on the Resource Offer Results screen. This screen provides the total amount of capacity committed by the Capacity Market Seller's resources for a selected RPM Auction (for which auction results have been posted).

Select **Auctions → Auction Results**

Select **Resource Offers** tab

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

For the Delivery Year RPM Auction selected, the following data columns are displayed for each resource offered in the Capacity Market Seller's account and may be further filtered:

Resource: Name of the resource offered into the RPM Auction.

Resource Type: Type of resource (GEN, DR, EE, or AGG).

LDA: Modeled Locational Deliverability Area where the resource is located.

Product Type: Product type that the resource offered/cleared in the RPM Auction.

Season: Season that the resource offered/cleared in the RPM Auction. This column is effective with the 2020/2021 Delivery Year.

MOPR Type: MOPR Type that the resource offered/cleared in the RPM Auction. This column is effective with the 2022/2023 Delivery Year.

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Offered MW: The total amount of unforced capacity MW for the product type/season that was offered in the RPM Auction for the resource.

Cleared MW: The total amount of unforced capacity MW for the product type/season that was cleared in the RPM Auction for the resource. This value does not include make-whole MW and will be equal to or less than the Offered MW for the product type/season for such resource.

Make Whole MW: The total amount of make-whole MWs for the product type/season that were committed in the auction for the resource.

Clearing Price: The Resource Clearing Price ($/MW-day) that applies to the resource's Cleared MWs and Makewhole MWs for the product type/season.

Task 17: View Capacity Bid Segment Results

Individual buy bid segment results for an RPM Auction can be viewed on the Capacity Bids screen. To view Buy Bid segment results, follow the steps below:

Select **Auctions → Auction Results**

Select **Capacity Bids** tab

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

For the Delivery Year RPM Auction selected, the following data columns are displayed for each buy bid segment submitted in the auction in the Capacity Market Seller's account, and may be further filtered:

LDA: Name of the modeled Locational Deliverability Area where the buy bid was submitted.

Product Type: Name of the Product Type specified in the buy bid segment.

Segment Name: Segment number applicable to the buy bid segment (1-10).

Max MW: Maximum MW amount of unforced capacity submitted for the buy bid segment.

Bid Price: Offer price ($/MW-day) submitted for the buy bid segment.

Cleared MW: Amount of unforced capacity MW cleared for the buy bid segment. This value will be between 0 MW and the Max MW value entered in the buy bid segment.

Clearing Price: Resource Clearing Price ($/MW-day) applicable for the buy bid segment.

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Task 18: View PRD Election Segment Results

Individual PRD Election segment results can be viewed on the PRD Elections screen under the Auction Results. To view PRD Election segment results, follow the steps below:

Select **Auctions → Auction Results**

Select **PRD Elections**

Select the desired Delivery Year from **Delivery Year** drop down list

Select the desired Auction Type from **Auction Type** drop down list

For the Delivery Year RPM Auction selected, the following data columns are displayed for each PRD Election segment submitted during the PRD Election window in the PRD Provider's account, and may be further filtered:

ZoneSubZone: Zone or subZonal LDA where the PRD Election segment was submitted.

LDA: Name of the Locational Delivery Area that applies to the PRD election segment.

Segment Name: Segment number applicable to the PRD Election segment (1-10).

Min MW (ICAP): Minimum amount of Nominal PRD Value (in ICAP terms) submitted for the PRD Election segment.

Max MW (ICAP): Maximum amount of Nominal PRD Value (in ICAP terms) submitted for the PRD Election segment.

Reservation Price: Reservation price ($/MW-day) submitted for the PRD Election segment.

Cleared MW(ICAP): Amount of Nominal PRD Value for the PRD Election segment that was cleared/commited in the RPM Auction. This value can be equal to or less than the Max MW amount in the PRD Election segment.

Task 19: View Qualified Transmission Upgrade Offer Segment Results

A Qualified Transmission Upgrade sell offer segment results can be viewed on the Qualified Transmission Upgrade Offers screen. To view QTU offer segment results, follow the steps below:

Select **Auctions → Auction Results**

Select **Qualified Transmission Upgrade Offers**

Select the desired Delivery Year from **Delivery Year** drop down list

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For the Delivery Year selected, the following data columns are displayed for each Transmission Upgrade offer segment submitted during the Delivery Year Base Residual Auction in a Capacity Market Seller's account, and may be further filtered:

Transmission Upgrade: Name of the Qualified Transmission Upgrade.

Source LDA: Name of the source LDA associated with the transmission upgrade.

Sink LDA: Name of the sink LDA associated with the transmission upgrade.

Segment Name: Segment number applicable to the Transmission Upgrade offer segment (1-10).

Min MW: Minimum amount of unforced capacity MW offered for the Transmission Upgrade offer segment.

Max MW: Maximum amount of unforced capacity MW offered for the Transmission Upgrade offer segment.

Marginal Cost: Sell offer price ($/Mw-day) submitted for the Transmission Upgrade offer segment.

Scheduling Option: The scheduling option submitted for the Transmission Upgrade offer segment.

Cleared MW: Amount of unforced capacity MW cleared for the Transmission Upgrade offer segment. This value does not include make-whole MW and will be less than or equal to the Max MW value entered in the Transmission Upgrade offer segment.

Makewhole MW: Amount of unforced capacity MW committed as make-whole MW for the Transmission Upgrade offer segment in the Base Residual Auction.

Clearing Price: Resource Clearing Price applicable to the Transmission Upgrade offer segment.

Task 20: View Flexible Self Scheduling Offer Results

Zonal Flexible Self Scheduling offer results can be viewed on the Flexible Self Scheduling Offers screen. To view the zonal summary results as a result of Flexible Self Schedule Offer segments, follow the steps below.

Select **Auctions → Auction Results**

Select **Flexible Self Scheduling Offers**

Select the desired Delivery Year from **Delivery Year** drop down list.

Auction Type will be defaulted to BASE.

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For the Delivery Year Base Residual Auction selected, the following data columns are displayed for each zone in Flexible Self Scheduling Offer segments were submitted in the Capacity Market Seller's account, and may be further filtered:

Zone: Zone where Flexible Self Scheduling Offer segments were submitted.

Self Scheduling Factor: The percentage of zonal unforced capacity obligation that the Capacity Market Seller submitted in their Flexible Self Schedule Parameters.
UCAP Obligation MW: The amount of unforced capacity obligation requested to be covered by Capacity Market Seller's self-scheduled or flexible self-scheduled resources based on the self-scheduling factor specified.

Awarded MW: Amount of unforced capacity obligation that was covered by self-scheduled or flexible self-scheduled resources in the Base Residual Auction.

Shortage MW: Amount of unforced capacity obligation that was not covered by self-scheduled or flexible self-scheduled resources in the Base Residual Auction. .

Remainder MW: Amount of unforced capacity MW from flexible self-scheduled resources that was offered into the Base Residual Auction at the offer price(s) specified in the flexible self-schedule offer segment (s).

Credit

Credit Overview

A RPM Post Auction Credit Requirement is established for any Capacity Market Seller that committed into RPM Auctions any planned capacity resources requiring credit to posted with PJM Treasury. The Post Auction Credit Requirement calculated for a planned resource committed into an RPM Auction is a fixed Post Auction Credit Rate times the unforced MW committed, times an RPM Credit Adjustment Factor.

Task 1: View Credit Requirements

The **Credit** screen provides details on the Post-Auction RPM Credit Requirement participants must maintain for planned capacity resources that are committed in an RPM Auction. To view the Credit details for planned capacity resources that are committed to RPM, follow the steps below:

Select **Credit**

A list of the Post-Auction Credit Requirements for planned resources will be displayed in a table format. The following columns are displayed and can be further filtered.

Delivery Year: The Delivery Year applicable to the Post-Auction Credit Requirement.

Auction Type: The Auction applicable to the Post-Auction Credit Requirement.

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Resource ID: The unique identification number of the planned resource.

Resource Name: The name of the planned capacity resource.

Type: The type of resource requiring credit (GEN, DR, EE, or AGG).

Queue Number: The interconnection queue number that the planned generation resource was studied under.

Planned MW: The MW value in unforced capacity terms requiring credit for the planned resource.

Adjustment Factor: The factor applied to the credit requirement for achieving milestones.

Credit Requirement: The total credit required ($) for a planned resource is calculated as Planned MW times Adjustment Factor times Credit Rate.

Credit Rate: The applicable Post-Auction Credit Rate applied to the planned resource.

FRR

FRR Overview

There are two tabs available from the FRR primary navigation menu.

Summary: The Summary tab lists an FRR Entity's FRR Capacity Plan requirements for a Delivery Year.

Resource Commitment: The Resource Commitment tab lists all the resource committed to the FRR Entity's FRR Capacity Plan for the date selected.

Task 1: View FRR Capacity Plan Summary

An FRR Entity may view a summary of the requirements applicable to their Delivery Year Capacity Plan (such as unforced capacity obligation, threshold, caps, and product-type requirements) from the Summary tab. To view a summary of the requirements applicable to a Delivery Year FRR Capacity Plan, follow the steps below:

Select **FRR**

The screen will default to the **Summary** tab.

Select the desired Delivery Tear from the **Delivery Year** dropdown.

Based on the Delivery Year selected, a summary of the requirements applicable to the Delivery FRR Capacity Plan are displayed in a table format. The following columns are displayed.

Delivery Year: The Delivery Year of the FRR Capacity Plan.

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Obligation MW: The total MW amount of unforced capacity obligation required to be satisfied by FRR resource commitments for each day of the selected Delivery Year.

Threshold MW: If an FRR Entity intends to sell excess capacity into RPM Auctions, the MW amount required in excess of the obligation MW value to be satisfied in their FRR Capacity Plan. The Threshold MW is equal to the Preliminary Daily Unforced Capacity Obligation plus the lesser of (a) 0.03 * Preliminary Daily Unforced Capacity Obligation or (b) 450 MW.

Sales Cap MW: The maximum MW amount permitted to be offered into the RPM Auctions.

Self Schedule Cap MW: The maximum MW amount permitted to be self-scheduled in the RPM Auctions.

Min Annual Requirement MW: The minimum MW quantity, of the Annual product type, required to be committed to the FRR Capacity Plan for the DY. This column is displayed prior to the 2019/2020 Delivery Year. Although the column displays for 2017/2018 and 2018/2019 Delivery Years, a Limited DR Resource Constraint (maximum level of Limited DR Resources that may be committed to the FRR Plan) is enforced for such Delivery Years.

Min Extended Summer Requirement MW: The minimum MW quantity, of the Extended Summer product type, required to be committed to the FRR Capacity Plan for the DY. This column is displayed prior to the 2019/2020 Delivery Year. Although the column displays for the 2017/2018 and 2018/2019 Delivery Years, a Sub-Annual Resource Constraint (maximum level of Limited DR and Extended Summer DR Resources) is enforced for such Delivery Years.

Max Base DR/EE Committed MW: The maximum MW quantity of Base DR and Base EE product-type resources that may be committed to the FRR Capacity Plan for the Delivery Year. This column is effective for the 2019/2020 Delivery Year only.

Max Base Committed MW: The maximum MW quantity of Base DR, Base EE, and Base generation product-type resources that may be committed to the FRR Capacity Plan for the Delivery Year. This column is effective for the 2019/2020 Delivery Year only.

Task 2: View FRR Capacity Plan Resource Commitments

The **Resource Commitments** tab displays an FRR Entity's FRR Capacity Plan resource commitments for a desired date. To view FRR Capacity Plan resource commitments, follow the steps below:

Select **FRR**

Select **Resource Commitments** tab

Enter the desired date in the **Date** field.

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Based on the date entered, a list of resources in the FRR Entity's FRR Capacity Plan will be displayed in table format where a resource's FRR commitment details for the entered date can be viewed. The following columns are displayed and may be further filtered.

Resource Name: The name of the resource committed to the FRR Capacity Plan.

Resource ID: The unique identification number of the resource.

Resource Type: The resource type of the resource. (i.e., GEN, DR, or EE)

Product Type: The product type of the resource.

Start Date: Actual start date of the displayed commitment data for the resource.

Stop Date: Actual stop date of the displayed commitment data for the resource.

EFORd: The most recent one-year EFORd value for the generation resource that is available. The one-year EFORd for a Delivery Year is finalized by November 30th prior to the start of such Delivery Year.

Committed Product Type: Product-type commitment applicable to the resource (i.e., Base DR/EE, Base or Capacity Performance). Committed product type is populated starting with the 2019/2020 Delivery Year.

Designated ICAP MW: The ICAP MW amount committed on the resource for the entered date and is also applicable for the time period indicated by the start date and stop date.

Calculated UCAP MW: The UCAP MW amount committed to the FRR Capacity Plan for the entered date and is also applicable for the time period indicated by the start date and stop date. days. Calculated UCAP MW is calculated as Designated ICAP MW times (1- EFORd).

Task 3: View/Update Existing FRR Resource Commitments Details

An FRR Entity can view existing FRR resource commitment details by following the steps below:

Select **FRR**

Select **Resource Commitments** tab

Enter the desired date in the **Date** field to populate the table underneath (see FRR: Task 2).

To view the details of a specific resource, click on the desired resource row to highlight the resource. Right click on the highlighted resource row and select **View**. A FRR Resource Commitment transaction pop up window will appear with the following details for the highlighted resource.

Start Date: Start Date of the FRR commitment.

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Stop Date: Stop Date of the FRR commitment.

Resource: The name of the resource.

EFORd Type: A radio button indicates the selection of EFORd or EFORd-5 at the time of the initial FRR Plan commitment. This value will be used when calculating the Designated MW (UCAP) until the final EFORd for the Delivery Year is set.

Committed Product Type: Committed product type applicable to the resource's FRR commitment (i.e., Base DR/EE, Base or Capacity Performance for 2019/2020 Deliver Year).

Designated MW (ICAP): The ICAP MW amount committed to the FRR Capacity Plan for the resource.

Designated MW (UCAP): The corresponding UCAP MW amount committed to the FRR Capacity Plan. Designated MW (UCAP) is calculated as Designated MW (ICAP) * (1-applicable EFORd).

Exempt MW (ICAP): Enter the amount of MW considered as exempt you wish to commit to the FRR Capacity Plan. This field is effective June 1, 2022.

Existing MW (ICAP): Enter the amount of MW considered as existing for MOPR you wish to commit to the FRR Capacity Plan. This field is effective June 1, 2022.

New MW (ICAP): Enter the amount of MW considered as new for MOPR you wish to commit to the FRR Capacity Plan. This field is effective June 1, 2022.

Available Segments: An Available Segments table indicates the Available MWs remaining on the resource during the time period applicable to the start date and stop date in the Available Segments table.

An FRR Entity can update the existing FRR Resource Commitment transaction by updating the editable fields in the pop-up window as desired:

Start Date: Editable if the current start date is in the future.

Stop Date: Editable if the current stop date is in the future.

EFORd Type: Editable if the current start date is in the future. Select EFORd or EFORd-5 by clicking the corresponding radio button.

Committed Product Type: Select the appropriate product type commitment applicable to the resource from the drop down list.

Designated MW (ICAP): Enter the MW value in installed capacity terms you wish to commit to the FRR Capacity Plan.

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Designated MW (UCAP): This value is automatically calculated and represents the Designated MW in unforced capacity terms. Designated MW (UCAP) is calculated as Designated MW (ICAP) times (1- applicable EFORd).

Exempt MW (ICAP): Enter the amount of MW considered as exempt you wish to commit to the FRR Capacity Plan. This field is effective June 1, 2022.

Existing MW (ICAP): Enter the amount of MW considered as existing for MOPR you wish to commit to the FRR Capacity Plan. This field is effective June 1, 2022.

New MW (ICAP): Enter the amount of MW considered as new for MOPR you wish to commit to the FRR Capacity Plan. This field is effective June 1, 2022.

Click the **Save** button, followed by the **Confirm** button to submit the updated FRR commitment data.

Click the **Close** button to close the pop-up window and return to the **Resource Commitments** tab.

Task 4: Create a New FRR Resource Commitment

An FRR Entity can create new FRR Resource Commitments to satisfy their Delivery Year unforced capacity obligation by following the steps below:

Select **FRR**

Select **Resource Commitments** tab

Right click on the **Create FRR Transaction** button and select **Resource Commitment** from the drop down list

A **FRR Resource Commitment Transaction** pop-up window appears and the following data fields may be updated:

Start Date: Enter the start date of the new FRR Resource Commitment.

Stop Date: Enter the stop date of the new FRR Resource Commitment.

Resource: Select the name of the resource to be committed.

EFORd Type: Click either the EFORd or EFORd5 radio button. This selection determines which EFORd to use when calculating the Designated MW (UCAP) value.

Designated MW (ICAP): Enter the MW value in installed capacity terms you wish to commit to the FRR Capacity Plan.

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Designated MW (UCAP): This value is automatically calculated and represents the corresponding UCAP MW value committed to the FRR Capacity Plan. Designated MW (UCAP) is calculated as Designated MW (ICAP) * (1- applicable EFORd).

Exempt MW (ICAP): Enter the amount of MW considered as exempt you wish to commit to the FRR Capacity Plan. This field is effective June 1, 2022.

Existing MW (ICAP): Enter the amount of MW considered as existing for MOPR you wish to commit to the FRR Capacity Plan. This field is effective June 1, 2022.

New MW (ICAP): Enter the amount of MW considered as new for MOPR you wish to commit to the FRR Capacity Plan. This field is effective June 1, 2022.

Total MW (ICAP): This value will be calculated as the sum of the Exempt MW (ICAP) + Existing MW (ICAP) + New MW (ICAP) fields. This field is effective June 1, 2022.

Available Segments: The table displays the Available MW in ICAP terms for the selected resource that is applicable for the time period indicated and can be committed to the FRR Capacity Plan.

Click the **Save** button, followed by the **Confirm** button to submit the new FRR commitment data.

Click the **Close** button to close the FRR Resource Commitment Transaction pop-up window and return to the **Resource Commitments** tab.

Task 5: Copy an Existing FRR Capacity Plan

All FRR resource commitments from an existing FRR Capacity Plan can be copied into a future delivery year by following the steps below:

Select **FRR**

Select **Resource Commitments** tab

Right click on the **Create FRR Transaction** button and select **Copy Existing FRR Plan** from the drop down list

Update the following fields as desired:

From Delivery Year: Select the Delivery Year to copy.

To Delivery Year: Select the Delivery Year to populate with FRR Resource Commitments.

Click the **Save** button, followed by the **Confirm** button to submit the copy the FRR commitment data.

All FRR Resource Commitments will be copied provided the resource has the same or greater amount of capacity available to support the Resource Commitment. If a resource's available

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capacity is less than the FRR Resource Commitment, the record will not be transferred. Individual FRR Resource Commitments can then be updated or created by following the steps in FRR: Task 3 and FRR: Task 4.

Click the **Close** button to close the **FRR Resource Commitment Transaction** pop-up window and return to the **Resource Commitments** tab.

Performance

Performance Overview

There are four secondary level menus that can be selected from the **Performance** primary level navigation menu:

Deficiency Summary: Company specific deficiency information is displayed in the **Company Specific Deficiency Data** tab and resource specific deficiency information is displayed in a **Resource Specific Deficiency Data** tab.

Peak Hour Period Availability: Company specific LDA Peak Hour Period Availability information is displayed in the **LDA Results** tab and resource specific Peak Hour Period Availability information is displayed in a **Resource Results** tab.

LM Event Compliance: Company specific LM Event Compliance information on a provider level is displayed in the **Provider Results** tab and registration specific information is displayed in the **Registration Results** tab.

LM Test Compliance: Company specific LM Test Compliance information on a zonal level is displayed in the **Zonal Test Results** tab and registration specific information is displayed in the **Registration Test Results** tab.

Task 1: View Company Specific Deficiency Data

Company specific deficiency information is available on the Company Specific Deficiency Data tab. To view Company Specific Deficiency Data follow the steps below:

Select **Performanc**e -> **Deficiency Summary**

Select **Company Specific Deficiency Data** tab

Enter a **Start Date** and **Stop Date** to view deficiency data that is effective during the date range entered.

The following columns will be displayed and can be further filtered:

Start Date: Effective start date of the deficiency.

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Stop Date: Effective stop date of the deficiency.

Deficiency Type: The type of deficiency. Below are the possible types of deficiencies that the user may see:

- *Daily FRR Commitment Deficiency*
- *Daily FRR CP Commitment Deficiency*
- *Daily RPM Commitment Deficiency*
- *Daily RPM CP Commitment Deficiency*
- *FRR Peak Hour Availability*
- *FRR Peak Season Maintenance*
- *FRR Rating Test*
- *RPM Peak Hour Availability*
- *RPM Peak Season Maintenance*
- *RPM Rating Test*
- *Transmission Upgrade Delay*

Deficiency MW: The total MW of deficiency for the Deficiency type for the company.

**Only calculated deficiencies will be displayed. If no data is displayed on the screen, no deficiencies have been assessed for the date range. Several deficiencies are assessed at the end of the Delivery Year. Please refer to Manual 18 for further information regarding resource performance assessments and specific deficiency calculations.

Task 1A: View Resource Specific Deficiency Data

Resource specific deficiency information is available on the Resource Specific Deficiency Data tab. To view Resource Specific Deficiency Data follow the steps below:

Select **Performance** -> **Deficiency Summary**

Select **Resource Specific Deficiency Data** tab

Enter a **Start Date** and **End Date** to view deficiency data that is effective during the date range entered.

The following columns will be displayed and can be further filtered:

Resource ID: Unique identification number of the resource.

Resource Name: Name of the deficient resource.

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Start Date: Start date of the deficiency.

Stop Date: Stop date of the deficiency.

Deficiency Type: Type of deficiency.

Deficiency MW: The MW amount of the deficiency.

Task 2: View Peak Hour Period Availability LDA Results

A company's net Peak Hour Period Availability information by constrained LDA is available on the Peak Hour Period Availability LDA Results tab. To view LDA Results follow the steps below:

Select **Performance -> Peak Hour Period Availability**

Select **LDA Results**

Select the desired Delivery Year from **Delivery Year** drop down.

Resource-specific Peak Hour Period Availability results for a company are netted to determine the net LDA results for Peak Hour Period Availability. The following data columns are displayed on the LDA Results tab and may be further filtered:

LDA: Lists the LDAs that were constrained for the given Delivery Year.

Net Pk-Hr Period Capacity Shortfall: The initial net Peak Hour Period Capacity Shortfall for company's committed units in a constrained LDA.

Net Eligible Available PHPA Shortfall: The total net Eligible Available PHPA Shortfall for the Company by constrained LDA. A negative Net Eligible Available PHPA Shortfall may be used to reduce an initial positive net Pk-Hr Period Capacity Shortfall.

Adjusted Net Pk-Hr Period Capacity Shortfall: The adjusted Net Peak Hour Period Capacity Shortfall for the Company when taking the Net Eligible Available PHPA Shortfall into consideration. A provider's Net Eligible PHPA Shortfall may not be used to reduce a party's negative Net Peak Hour Period Capacity Shortfall or allow a party's positive Net Peak Hour Period Capacity Shortfall to become negative.

Net Pk-Hr Period Capacity Shortfall for RPM: The Adjusted Net Peak Hour Period Capacity Shortfall associated with RPM commitments.

Net Pk-Hr Period Capacity Shortfall for FRR: The Adjusted Net Peak Hour Period Capacity Shortfall associated with FRR commitments.

Weighted Average Resource Clearing Price: The weighted Average Resource Clearing Price in constrained LDA.

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A positive Net Pk-Hr Period Capacity Shortfall for RPM/FRR indicates a failure to perform, and will be assessed a penalty.

Negative Net Pk-Hr Period Capacity Shortfall for RPM/FRR indicates over performance and eligibility to receive a pro-rata share of any penalty monies collected in constrained LDA for selected Delivery Year.

Task 2A: View Peak Hour Period Availability Resource Results

A company's resource-specific Peak Hour Period Availability information is available on the Peak Hour Period Availability Resource Results tab. To view Resource Results follow the steps below:

Select **Performance -> Peak Hour Period Availability**

Select **Resource Results**

Select the desired Delivery Year from **Delivery Year** drop down list.

For the Delivery Year selected, the following data columns are displayed for each generation resource in the company's account and may be further filtered.

LDA: Constrained LDA where the generation resource resides.

Resource Name: Name of the generation resource.

EFORd-5: 5 year average EFORd for the resource.

EFORp: Peak-Period Equivalent Forced Outage Rate (EFORp) for the resource. EFORp represents the probability that a unit will not be available due to forced outages or forced deratings when there is a demand on the unit to generate during the defined peak hour periods.

Average Daily RPM ICAP Commitment Amount: Company's average daily RPM commitment on the resource in installed capacity terms for the Delivery Year selected.

Average Daily FRR ICAP Commitment Amount: Company's average daily FRR commitment on the resource in installed capacity terms for the Delivery Year selected.

Share of Total ICAP Commitment Amount: Company's share of the resource's Total Unit ICAP Commitment Amount.

Share of TCAP: Company's share of the expected availability of the committed portion of the unit during the defined peak-hour periods for the resource. Calculated as Share of Total Unit ICAP Commitment Amount of the generating unit times (1.0 – (EFORd-5)).

Share of PCAP: Company's share of the actual availability of the committed portion of the unit during the defined peak-hour periods for the resource. Calculated as Share of Total Unit ICAP Commitment Amount of the generating unit times (1.0 – EFORp).

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Share of Peak Hour Period Capacity Shortfall: Company's share of unit's Peak Hour Period Capacity Shortfall. Calculated as Share of TCAP minus Share of PCAP.

Pk-Hr Period Capacity Shortfall for RPM: Peak-Hour Period Capacity Shortfall due to company's RPM commitments on the unit. A positive Peak Hour Period Capacity Shortfall indicates underperformance while a negative Peak Hour Period Capacity Shortfall indicates over performance.

Pk- Hr Period Capacity Shortfall for FRR: Peak-Hour Period Capacity Shortfall due to company's FRR commitments on the unit. A positive Peak Hour Period Capacity Shortfall indicates underperformance while a negative Peak Hour Period Capacity Shortfall indicates over performance.

Share of Eligible Available ICAP Amount: Company's share of average daily Eligible Available Capacity in installed capacity terms for the selected Delivery Year. A unit's Eligible Available Capacity (EAC) represents the amount of the unit's uncommitted capacity for the Delivery Year that met the capacity resource obligations by (1) offering into the Day Ahead Energy Market (if available); (2) satisfying summer and winter capability test requirements; and (3) entering outages into eDART and eGADS.

Share of Eligible Available TCAP: Company's share of Eligible Available TCAP (Because the uncommitted capacity that acts as capacity resources are not expected to be available during the defined peak-hour periods, the TCAP is equal to 0).

Share of Eligible Available PCAP: Company's share of Eligible Available PCAP. A positive Eligible Available PCAP indicates over performance by the unit. Calculated as Share of average daily Eligible Available ICAP Amount times (1.0 – EFORp).

Share of Eligible Available Pk-Hr Period Shortfall: Company's Share of Eligible Available Peak Hour Period Shortfall for the unit. Calculated as Share of Eligible Available TCAP minus Eligible Available PCAP. A negative Share of Eligible Available Pk-Hr Period Shortfall indicates over performance by the unit.

Task 3: View Load Management Event Compliance Provider Results

Curtailment Service Providers (CSPs) are responsible for submittal of compliance data for each PJM initiated Load Management event in their zone during the compliance period. Compliance data will be analyzed and allocated based on the rules specified in Manual 18 and will be available for participant view prior to the billing period. Load Manage Event Compliance is not applicable to Demand Resources with Base or Capacity Performance commitments. A provider's net Load Management Event compliance results in a Compliance Aggregation Area are available on the Load Management Event Compliance Provider Results tab. To view Provider Results, follow the steps below:

Select **Performance -> LM Event Compliance**

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Select **Provider Results**

Select the desired Delivery Year from **Delivery Year** drop down list. *Delivery Years prior to 2014/2015 Delivery Year will not be available in Capacity Exchange.

Select ICAP or UCAP from the **Capacity Type** drop down list to view MW results in installed capacity (ICAP) or unforced capacity (UCAP) terms.

For the Delivery Year selected, the following data columns are displayed and may be further filtered.

Event Time: The date and start time of the Load Management event.

CSP Name: The short name of the Curtailment Service Provider that submitted the compliance data for the registrations in the Compliance Aggregation Area.

CAA: The Compliance Aggregation Area of Demand Resource Registrations that reported compliance data.

Allocated Compliance MW: The summation of the compliance over all registrations dispatched, by CAA. This is the net Compliance MW amount that will be allocated to registrations dispatched in the CAA.

Daily Penalty Charge: The total daily penalty charges ($) assessed for the Compliance Aggregation Area.

Task 3A: View Load Management Event Compliance Registration Results

A Curtailment Service Provider's Load Management Event compliance results for each dispatched registration in a Compliance Aggregation Area are available on the Load Management Event Compliance Registration Results tab. To view Registration Results, follow the steps below:

Select **Performance -> LM Event Compliance**

Select **Registration Results**

Select the desired Delivery Year from **Delivery Year** drop down list. *Delivery Years prior to 2014/2015 Delivery Year will not be available in Capacity Exchange.

Select ICAP or UCAP from the **Capacity Type** drop down list.

For the Delivery Year selected, the following data columns are displayed and may be further filtered.

Event Time: The date and start time of the Load Management event.

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CSP Name: Short name of the Curtailment Service Provider that submitted the compliance data for the registrations in the Compliance Aggregation Area.

Registration ID: Unique identification number of the registration that reported compliance data.

Registration Name: Name of the registration.

CAA: Compliance Aggregation Area where the registration is located.

Zone Name: Zone where the registration is located.

Lead Type: Lead type of the registration.

Product Type: Product type of the registration.

Share of Nominated MW: CSP's share of the nominated amount of the registration.

Share of Commitment MW: CSP's share of commitment amount (as a result of RPM auctions or transactions) associated with the registration.

Share of Reduction MW: CSP's share of actual load reduction amount associated with the registration.

Share of Registration Compliance MW: CSP's share of registration compliance MW. Calculated as Share of Reduction MW minus Share of Commitment MW. A negative value represents an under-compliant registration; a positive value represents an over-compliance.

Share of CAA Allocated Compliance MW: CSP's pro-rata share of the CAA Allocated Compliance MW by registration.

Adjustment Factor: For on-peak period events, the Adjustment Factor = lower of (1/# of Load Management Events during the on-peak period in which the registration was dispatched, or 0.50). For off-peak period events, the Adjustment Factor = 1/52.

Weighted Daily Revenue Rate: Weighted Daily Revenue Rate applicable to the registration.

Daily Penalty Charge: Daily penalty charge that is applicable for the registration for the Load Management Event.

For more information on how compliance values are calculated, please refer to the Load Management Event Compliance section of PJM Manual 18.

Task 4: View Load Management Test Compliance Zonal Test Results

Curtailment Service Providers (CSPs) are responsible for submittal of test compliance data in the absence of a PJM initiated Load Management event in their zone during the compliance period. Compliance data will be analyzed and allocated based on the rules specified in Manual 18 and will

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be available for participants to view prior to the billing period. A provider's net zonal test results by product-type are available on the Load Management Test Compliance Zonal Test Results tab. To view Zonal Test Results, follow the steps below:

Select **Performance -> LM Test Compliance**

Select **Zonal Test Results**

Select the desired Delivery Year from **Delivery Year** drop down list.

Select ICAP or UCAP from the **Capacity Type** drop down list.

For the Delivery Year selected, the following data columns are displayed and may be further filtered.

CSP Name: The short name of the Curtailment Service Provider that submitted the test compliance data.

Zone Name: The transmission zone applicable to the test.

Product Type: Product-type tested for the compliance test (Capacity Performance, Annual, Summer Extended, or Limited).

Committed MW: The commitment amount (as a result of RPM Auctions or capacity transactions) by zone for the CSP.

Test MW: The total initial Test MW by zone by product-type for the CSP.

Eligible for Retest: Indicates whether a particular CSP was eligible for a retest (A CSP is eligible for a retest if the CSP failed to provide the required load reduction in a zone by less than 25%).

Retest MW: The total Retest MW by zone by product-type for the CSP.

Shortfall MW: The total shortfall MW by zone by product-type for the CSP. (If a CSP is eligible for a retest and the CSP submitted retest MW values, the shortfall is the difference of the Committed MW and Retest MW. Otherwise, the shortfall is calculated as the difference of the Committed MW and Test MW.) A positive shortfall indicates underperformance, while a negative shortfall indicates over performance.

Task 4A: View Load Management Test Compliance Registration Test Results

A provider's test results by registration are available on the Load Management Test Compliance Registration Test Results tab. To view Registration Test Results follow the steps below:

Select **Performance -> LM Test Compliance**

Select **Registration Test Results**

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Select the desired Delivery Year from **Delivery Year** drop down list.

Select ICAP or UCAP from the **Capacity Type** drop down list.

For the Delivery Year selected, the following data columns are displayed and may be further filtered.

Zone Name: The zone where the registration is located.

Registration ID: The unique identification number of the registration.

ID: The Resource ID for the Demand Resource for which the registration is linked.

Registration Name: The name of the registration.

Product Type: The product type of the registration.

Nominated MW: The nominated MW value of the registration.

Test MW: The total initial Test MW (i.e., the load reduction provided during test) of the registration.

Initial Test: The status of the Initial Test (Passed if Test MW is greater than Nominated MW).

Retest MW: Retest MW (i.e., the load reduction provided during a retest) of the registration.

For more information on how test compliance values are calculated, please refer to the Load Management Test Compliance section of PJM Manual 18.

NRBTMG

NRBTMG Overview

Non-Retail Behind the Meter Generation (NRBTMG) menu in Capacity Exchange is used to administer the reporting, netting, and operational performance requirements of Non-Retail Behind the Meter Generation (NRBTMG) that are in Manual 14D, Appendix A. There are four secondary level menus that can be selected from the **NRBTMG** primary level navigation:

Unit Reporting: The Unit Reporting area allows the LSE/EDC that is responsible to report on NRBTMG that is located in a modeled wholesale area(s) that they serve to view, submit, modify, confirm, or download NRBTMG unit data. There are three tabs available from the Unit Reporting secondary level menu:

- **NRBTMG Characteristics:** The NRBTMG Characteristics tab is used to view the modeled NRBTMG unit characteristic data.

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- **Reporting & Confirmation:** The Reporting & Confirmation tab is used to view, submit, modify and confirm specific NRBTMG data for a Delivery Year (e.g., summer rated ICAP value, ICAP MWs in PJM Markets, and DR Hub registration ID) for NRBTMG units located in the wholesale area(s) the responsible LSE/EDC serves for such Delivery Year.

- **Change Requests:** The Change Requests tab is used to view previously submitted change requests, submit a new change request to modify previously submitted unit data after the annual reporting window has closed or submit a new unit request to initiate the modeling of a new NRBTMG unit in Capacity Exchange.

Generation Output: The Generation Output area allows for the responsible LSE/EDC to submit hourly generation output data during relevant coincident peak hours and performance compliance hours (emergency event hours for which PJM is measuring the NRBTMG unit's performance). There are two tabs available from the Generation Output secondary level menu:

- **Coincident Peak Hours:** The Coincident Peak Hours tab allows the responsible LSE/EDC for the Delivery Year to submit the hourly generation output data for a NRBTMG unit located in their wholesale area during relevant coincident peak (CP) hours that correspond to a November 1 - October 31 reporting year. The coincident peak hours for a November –October 31 reporting year include the zonal 1CP hour (used by EDC in determination of NSPL values for the subsequent calendar year), RTO 5CP hours, and any additional hour(s) specifically requested by the EDC (additional hours used by EDC in determination of either the network service peak load (NSPL) or obligation peak load (OPL) values for the subsequent calendar year or Delivery Year). The submitted generation output data is viewable not only to LSE responsible to report on the NRBTMG units for the wholesale area, but also to the EDC responsible for calculating the NSPL and OPL of the wholesale area in the zone. The submitted generation output data will be used by PJM to determine the expected performance level of NRBTMG unit for emergency events.

- **Event Hours:** The Event Hours tab allows the responsible LSE/EDC to submit the hourly generation output data during an emergency event that is subject to performance compliance. Hourly generation output data for the event will be used by PJM to determine if a NRBTMG unit located in the emergency action area generated at its expected performance level.

Outages: The Outages area allows the responsible LSE/EDC to view, modify or submit the scheduled outages of NRBTMG units. The scheduled outages during October through May and reported in advance of a performance compliance event can excuse MWs during performance compliance event.

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Performance: The Performance area allows the responsible LSE/EDC to view the expected performance level of NRBTMG unit(s) located in the wholesale area, view performance compliance event results determined by PJM, and any resulting netting reduction penalty that an EDC needs to consider in the determination of the NSPL and OPL of a wholesale area.

There are three tabs available from the Performance secondary level menu:

- **Expected Performance:** The Expected Performance tab allows the responsible LSE/EDC to view the PJM's calculation of expected performance level of NRBTMG units. The expected performance level of a NRBTMG unit for a November 1 through October 31 compliance year is calculated as the highest netting credit level realized for such unit for the prior November 1 through October 31 reporting year for generation output data, capped at the unit's netting capability value reported as of October 31 prior to the start of the compliance year. The highest netting credit level realized is the maximum hourly generation output level excluding any generation output participating in PJM Markets that was reported for such unit in the Coincident Peak Hours screen for the prior November 1 through October 31 reporting year.

- **Event Performance:** The Event Performance tab allows the responsible LSE/EDC to view performance compliance event results for NRBTMG units that were subject to performance compliance. A unit's performance shortfall is calculated as the expected performance level minus the average output over the period of the emergency event minus any excused MWs. The output of the NRBTMG unit during the emergency event is to be reported by the responsible LSE/EDC through the Event Hours tab screen in the Generation Output menu.

- **Netting Reduction:** The Netting Reduction tab displays the total netting reduction amount for a wholesale area due to all performance compliance events for a November 1 through October 31 compliance period. The total netting reduction amount for a wholesale area is the sum of the netting reduction amounts (displayed in the Event Performance tab) across all performance compliance events for the compliance period. The Netting Reduction screen is viewable to both the responsible LSE/EDC and to the EDC that is responsible to calculate the NSPL and OPL values for the wholesale area. As a penalty for failing to perform during emergency events for a November 1 through October 31 compliance period, the EDC is to account for the total netting reduction amount for the wholesale area in their procedures for calculating a wholesale area's NSPL or OPL for the subsequent calendar year/delivery year such that the total amount of operating NRBTMG that is

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allowed to net against the wholesale area's actual load during the relevant hours is reduced by the total netting reduction amount for the wholesale area.

Task 1: View NRBTMG Characteristics

To view the NRBTMG unit characteristic data, follow the steps below.

Select **NRBTMG → Unit Reporting**

Select **NRBTMG Characteristic** tab

Select the desired Delivery Year from **Delivery Year** drop down list

Based on the delivery year selected, a list of modeled NRBTMG units will be displayed in a table format. The following columns will be displayed and may be further filtered:

Unit ID: The unique identifier for the NRBTMG unit.

Unit Name: The name of the NRBTMG unit.

Account Name: The LSE/EDC billing account short name that is responsible for reporting on NRBTMG located in the modeled wholesale area.

In Service Date: The date the unit began operation.

Deactivation Date: The date of the retirement of the unit.

Zone: The transmission zone in which the modeled wholesale area is located.

Area: The name of modeled wholesale area in which the unit is located

Nameplate MW: The highest value on the generator nameplate in megawatts rounded to the nearest thousandth.

Distribution Owner: The owner/lessee/operator of the distribution facilities that the unit is using to transmit energy.

Start Date: The later of the in-service date or start date of the delivery year selected.

Stop Date: The earlier of the date of deactivation date or stop date of the delivery year selected.

EIA Plant Code: The EIA-assigned plant code if plant is registered with EIA.

County: The state county in which unit is located.

Street: The unit street address.

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City: The unit city.

State: The unit state.

Zip Code: The unit zip code.

EIA Prime Mover: The EIA prime mover code that describes the unit type.

EIA Prime Mover Code Definitions:

EIA Prime Mover Code	Code Description
BA	Energy Storage, Battery
CE	Energy Storage, Compressed Air
CP	Energy Storage, Concentrated Solar Power
FW	Energy Storage, Flywheel
PS	Energy Storage, Reversible Hydraulic Turbine (Pumped Storage)
ES	Energy Storage, Other
ST	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)
GT	Combustion (Gas) Turbine (does not include the combustion turbine part of a combined cycle; see code CT, below)
IC	Internal Combustion Engine (diesel, piston, reciprocating)
CA	Combined Cycle Steam Part
CT	Combined Cycle Combustion Turbine Part
CS	Combined Cycle Single Shaft (combustion turbine and steam turbine share a single generator)
CC	Combined Cycle Total Unit (use only for plants/generators that are in planning stage, for which specific generator details cannot be provided)
HA	Hydrokinetic, Axial Flow Turbine
HB	Hydrokinetic, Wave Buoy
HK	Hydrokinetic, Other
HY	Hydroelectric Turbine (includes turbines associated with delivery of water by pipeline)
BT	Turbines Used in a Binary Cycle (including those used for geothermal applications)
PV	Photovoltaic
WT	Wind Turbine, Onshore
WS	Wind Turbine, Offshore
FC	Fuel Cell
OT	Other

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EIA Primary Energy Source: The EIA primary energy source code that describes the unit fuel type.

EIA Prime Energy Source Code Definitions:

EIA Primary Energy Source Code	Code Description
ANT	Anthracite Coal
BIT	Bituminous Coal
LIG	Lignite Coal
SGC	Coal-Derived Synthesis Gas
SUB	Subbituminous Coal
WC	Waste/Other Coal (incl. anthracite culm, bituminous gob, fine coal, lignite waste, waste coal)
RC	Refined Coal
DFO	Distillate Fuel Oil (including diesel, No. 1, No. 2, and No. 4 fuel oils)
JF	Jet Fuel
KER	Kerosene
PC	Petroleum Coke
PG	Gaseous Propane
RFO	Residual Fuel Oil (incl. Nos. 5 & 6 fuel oils, and bunker C fuel oil)
SGP	Synthesis Gas from Petroleum Coke
WO	Waste/Other Oil (including crude oil, liquid butane, liquid propane, naphtha, oil waste, re-refined motor oil, sludge oil, tar oil, or other petroleum-based liquid wastes)
BFG	Blast Furnace Gas
NG	Natural Gas
OG	Other Gas
AB	Agricultural By-Products
MSW	Municipal Solid Waste
OBS	Other Biomass Solids
WDS	Wood/Wood Waste Solids (incl. paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids)
OBL	Other Biomass Liquids
SLW	Sludge Waste
BLQ	Black Liquor
WDL	Wood Waste Liquids excluding Black Liquor (including red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids)

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LFG	Landfill Gas
OBG	Other Biomass Gas (including digester gas, methane, and other biomass gases)
SUN	Solar
WND	Wind
GEO	Geothermal
WAT	Water at a Conventional Hydroelectric Turbine, and water used in Wave Buoy Hydrokinetic Technology, Current Hydrokinetic Technology, and Tidal Hydrokinetic Technology
WAT	Pumping Energy for Reversible (Pumped Storage) Hydroelectric Turbine
NUC	Nuclear (including Uranium, Plutonium, and Thorium)
PUR	Purchased Steam
WH	Waste heat not directly attributed to a fuel source (WH should only be reported when the fuel source is undetermined, and for combined cycle steam turbines that do not have supplemental firing.)
TDF	Tire-derived Fuels
MWH	Electricity used for energy storage
OTH	Other

Task 2: Submit NRBTMG Reporting Data

In June of each delivery year, the LSE/EDC that is responsible for reporting NRBTMG data for a modeled wholesale area, is expected to review the data on the Reporting & Confirmation screen, update data if needed, and confirm the data for the NRBTMG units located in the modeled wholesale area that is relevant for the Delivery Year during the reporting window (at least 31 days long).

The LSE account that was assigned the entire Obligation Peak Load value on June 1 of the Delivery Year for a modeled wholesale area in Capacity Exchange is responsible for the reporting requirements of NRBTMG for such Delivery Year. If a modeled wholesale area in Capacity Exchange is served by multiple LSEs, the EDC account for the area is typically responsible for reporting requirements of NRBTMG located in the modeled wholesale area for the Delivery Year. If uncertain whether or not your LSE or EDC account has NRBTMG reporting responsibilities, please email rpm_hotline@pjm.com for assistance.

To review, submit, update or confirm the NRBTMG unit reporting data for a delivery year, follow the steps below.

Select **NRBTMG → Unit Reporting**

Select **Reporting & Confirmation** tab

Select the desired Delivery Year from **Delivery Year** drop down list

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Based on the Delivery Year selected, a list of modeled NRBTMG units reporting data will be displayed in a table format can be viewed. The following columns will be displayed and may be further filtered:

Unit ID: The unique identifier for the NRBTMG unit.

Unit Name: The name of the NRBTMG unit.

Account Name: The LSE/EDC billing account short name that is responsible for reporting on NRBTMG located in the modeled wholesale area.

Start Date: The later of the in-service date or start date of the delivery year.

Stop Date: The earlier of the deactivation date or stop date of the delivery year.

Zone: The transmission zone in which the modeled wholesale area is located.

Area: Name of modeled wholesale area in which the unit is located

Nameplate MW: The highest value on the generator nameplate in megawatts rounded to the nearest thousandth.

Registration ID: Enter the current registration ID from DR Hub if the unit is included in Pre-Emergency, Emergency, or Economic Load Response registration for the current Delivery Year.

Summer Rated ICAP MW: Enter the Summer Rated ICAP Value of unit per Manual 14-D, Appendix A, rounded to the nearest thousandth.

ICAP MW in PJM Markets: If applicable, enter the amount of installed capacity MWs that are participating in PJM Markets for the current Delivery Year (as a Capacity Resource or Energy Resource or in the Pre-Emergency, Emergency, or Economic Load Response program) and are expected to be participating in PJM Markets during coincident peak hours such that the MWs are not expected to net against wholesale area load during coincident peak hours.

Netting Capability MW: The difference between the Summer Rated ICAP Value and ICAP in PJM Markets (MW), rounded to the nearest tenth.

Reporting Confirmed: Yes or No **i**ndicates whether or not the unit reporting data has been confirmed. If the responsible LSE/EDC updates any of the NRBTMG unit reporting data, such as Registration ID, Summer Rated ICAP MW, or ICAP MW in PJM Markets, then the Reporting Confirmed will be automatically confirmed and display Yes. The responsible LSE/EDC can also confirm the data without updating any of the unit reporting data.

To update and/or confirm a single row in the table:

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Click on a row to highlight the specific unit data row. Prior to confirmation, review the unit reporting data of the highlighted row for accuracy. If data is accurate, select **Yes** from the Confirmed drop down list box to confirm the data. Click the **Save** button to submit the confirmation. If data needs to be updated for the Delivery Year, enter the updated data into the editable data fields (Registration ID, Summer Rated ICAP MW, or ICAP MW in PJM Markets). Click the **Save** button to submit the updated data and the Reporting Confirmed field will automatically display Yes. If the Reporting Confirmed filed is Yes, the user may still submit a change to the unit data in the editable data fields while the reporting window is still open. Click the **Save** button to save any changes.

Task 3: View Change Request

To view previously submitted change requests, follow the steps below.

Select **NRBTMG → Unit Reporting**

Select **Change Request** tab

A list of change requests will be displayed in a table format in descending order of Request ID. The following columns will be displayed and may be further filtered:

Request ID: The unique identifier for the change request.

Request Type: The type of the change request. (New Unit or Existing Unit)

Request Status: The status of the change request. (New Request or Processed)

Unit ID: The unique identifier for the NRBTMG unit.

Unit Name: The name of the NRBTMG unit.

In Service Date: The date the unit began operation.

Deactivation Date: The date of the retirement of the unit.

Zone: The transmission zone in which the modeled wholesale area is located.

Area: The name of modeled wholesale area in which the unit is located.

Nameplate MW: The highest value on the generator nameplate in megawatts rounded to the nearest thousandth.

Agent: The agent name who submitted the Change Request.

Timestamp: The timestamp when the Change Request was submitted.

There are two options to view the additional detailed information for a specific change request.

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Option (1): Click on a row to highlight the specific change request. Once the row is highlighted, right click on the highlighted row and a **View** button will appear. Click the **View** button to display a pop-up screen that will contain the complete details of a change request.

Option (2): Click the CSV button to download the complete details of every change request displayed on the Change Request screen.

Task 4: Submit Change Request

After the annual reporting window has closed, the responsible LSE/EDC for the Delivery Year may report a change through the **Create Change Request** button of **Change Requests** tab to change previously reported unit data (including the submittal of deactivation date if a unit has been deactivated) for an existing NRBTMG unit. Within 31 days after a NRBTMG unit located in the wholesale area has gone in-service, the responsible LSE/EDC must report a new in-service NRBTMG unit located in the wholesale area through the **Create Change Request** button of the **Change Requests** tab. The reporting of a new unit is to initiate the modeling of a new NRBTMG unit in Capacity Exchange.

To submit a Change Request, follow the steps below.

Select **NRBTMG → Unit Reporting**

Select **Change Request** tab

Right click **Create Change Request** button

Select "New Unit" if requesting a new unit to be modeled in Capacity Exchange or select "Existing Unit" if desire to update previously submitted unit data.

A pop-up window opens for the user to submit the required data for a Change Request. Expand the pop-up window completely by clicking the "+" in the upper right corner of the pop-up window.

Request Type: The type of change request (New Unit or Existing Unit) is displayed.

Delivery Year: The current Delivery Year will be displayed.

New Unit Name: Enter the name of the new NRBTMG unit. If plant is registered with EIA, concatenate EIA Plant Name and EIA Generator ID.

Unit Name: Select the desired existing unit from Unit Name drop down list.

In-Service Date: Enter the In-Service Date of the unit if a new unit has begun operation.

Deactivation Date: Enter the Deactivation Date if the existing unit has deactivated.

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Zone: If a new unit request, select the transmission zone from the Zone drop down list in which the modeled wholesale area and the new NRBTMG unit is located.

Area: If a new unit request, select the modeled wholesale area in which the new NRBTMG unit is located from the Area drop down list.

EIA Plant Code: If plant is registered with EIA, enter EIA-assigned plant code; if not, leave blank.

Distribution Owner: Enter the owner/lessee/operator of the distribution facilities that the unit is using to transmit energy.

County: Enter the state county in which unit is located.

Street: Enter the unit street address.

City: Enter the unit city.

State: Enter the unit state.

Zip Code: Enter the unit zip code.

EIA Prime Mover Code: Select the EIA Prime Mover Code from EIA Prime Mover Code drop down list.

EIA Primary Energy Source Code: Select the EIA Primary Energy Source code from EIA Primary Energy Source Code drop down list.

Nameplate MW: Enter the highest value on the generator nameplate in megawatts rounded to the nearest thousandth.

Summer Rated ICAP MW: Enter the Summer Rated ICAP Value of unit per Manual 14-D, Appendix A, rounded to the nearest thousandth.

ICAP MW in PJM Markets: If applicable, enter the amount of installed capacity MWs that are participating in PJM Markets for the selected Delivery Year (as a Capacity Resource or Energy Resource or in the Pre-Emergency, Emergency, or Economic Load Response program) and are expected to be participating in PJM Markets during coincident peak hours such that the MWs are not expected to net against the wholesale area load during coincident peak hours.

Registration ID: Enter the current Registration ID from DR Hub if the unit is included in Pre-Emergency, Emergency, or Economic Load Response registration for current Delivery Year.

Checkbox Please confirm the unit has permission to use the distribution system from the owner, lessee, or operator of the distribution system: For New Unit Request, LSE/EDC need have this checked.

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Agent Note: If desired, enter a note or comment.

Click the **Save** button.

A Confirm Action pop-up window will be displayed. Click **Confirm** button if you want to commit the change request. Click **Cancel** if want to cancel the change request.

If clicked **Confirm** button, verify the Request Id generated. The request will initially be assigned a status of "New Request". PJM will review and process the change request. Once PJM has completed the review and processing of the change request, the status will be change to "Processed".

Click the **Close** button to close the pop-up window and return to NRBTMG secondary level menu.

Task 5: Submit Coincident Peak Hours Generation Output Data

The responsible LSE/EDC for the Delivery Year is to report Coincident Peak Hours generation output data during the month of November of the Delivery Year for the prior November 1 through October 31 reporting year and complete the reporting of generation output data by November 30 of the Delivery Year. For example, the responsible LSE/EDC for the June 1, 2020 Delivery Year is reporting generation output data for the CP hours that correspond to the November 1, 2019 – October 31, 2020 reporting year by November 30, 2020.

To submit the Coincident Peak Hours generation output data, follow the steps below.

Select **NRBTMG → Generation Output**

Select **Coincident Peak Hours** tab

Select the Reporting Year from **Reporting Year** drop down list

Based on the reporting year selected, the unit(s) and hours for which you need to submit generation output data will be displayed in a table format. The following data columns are displayed in the table.

Unit ID: The unique identifier for the NRBTMG unit.

Unit Name: The name of the NRBTMG unit.

Account Name: The LSE/EDC billing account short name that is responsible for reporting on NRBTMG located in the modeled wholesale area.

Zone: The transmission zone in which the modeled wholesale area is located.

Area: Name of modeled wholesale area in which the unit is located

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Hour ID: The unique identifier for the Hour Ending EPT.

Output Hour Type: The type of output hour for the Hour Ending EPT (ZONAL 1 CP NSPL, RTO 5 CP OPL, or ZONAL ADDITIONAL HOUR).

Hour Ending EPT: The hour in Hour Ending EPT for which generation output data needs to be reported.

Total Output MW: The total generation output MW of the NRBTMG unit for the Hour Ending EPT.

Output MW in PJM Markets: The generation output MW of the NRBTMG unit that is participating in PJM Markets for the Hour Ending EPT.

When the Coincident Peak Hours generation output data has been entered, click the **Save** button to save the generation output data.

Task 6: Submit Event Hours Output Data

The responsible LSE/EDC is to report hourly generation output data during an emergency event that will be evaluated for performance compliance. The responsible LSE/EDC is to report hourly generation output data for a performance compliance event, no later than 31 days after the event month. Hourly generation output data during the event will be used by PJM to determine if a NRBTMG unit located in the emergency action area generated at its expected performance level.

To submit the Event Hours generation output data, follow the steps below.

Select **NRBTMG → Generation Output**

Select **Event Hours** tab

Select the Compliance Year from **Compliance Year** drop down list

Select the event from the **Events** drop down list

Based on the compliance year and the event selected, a list of all modeled units with hours for which you need to submit generation output data will be displayed in a table format. The following data columns are displayed in the table.

Unit ID: The unique identifier for the NRBTMG unit.

Unit Name: The name of the NRBTMG unit.

Account Name: The LSE/EDC billing account short name that is responsible for reporting on NRBTMG located in the modeled wholesale area.

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Zone: The transmission zone in which the modeled wholesale area is located.

Area: Name of modeled wholesale area in which the unit is located

Event Name: The event name of the emergency event.

Hour ID: The unique identifier for the Hour Ending EPT.

Hour Ending EPT: The hour in Hour Ending EPT for which generation output data needs to be reported.

Total Output MW: The total generation output MW of the NRBTMG unit for the Hour Ending EPT.

Output MW in PJM Markets: The generation output MW of the NRBTMG unit that is participating in PJM Markets for the Hour Ending EPT.

When the Event Hours generation output data has been entered, click the **Save** button to save the generation output data.

Task 7: View Scheduled Outages

The Outages screen allows a responsible LSE/EDC to view previously submitted scheduled outages and notify PJM of scheduled outages of NRBTMG units located in the wholesale area. The responsible LSE/EDC may change outage details if the outage is in the future and change the stop time if the outage is in progress.

Only those scheduled outages during the period of October through May and reported to PJM in advance of a performance compliance event will excuse the unit from the failure to perform during a performance compliance event. Scheduled outages during the period of June through September may not excuse the unit from failure to performance during a performance compliance event.

To view scheduled outages, follow the steps below.

Select **NRBTMG → Outages**

Select the Compliance Year from **Compliance Year** drop down list

Based on the compliance year selected, a list of previously submitted scheduled outages for the compliance year will be displayed. The following data columns are displayed in the table and may be further filtered.

Outage ID: The unique identifier for the scheduled outage.

Unit ID: The unique identifier for the NRBTMG unit.

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Unit Name: The Unit Name.

Outage Type: The outage type (Partial, Full).

Outage Start Time EPT: The outage start date/time in EPT.

Outage Stop Time EPT: The outage stop date/time in EPT.

Partial Outage MW: The partial outage MW for a Partial Outage. The amount of MWs that will not be available due to the Partial Outage. If the unit is on a Full outage, a MW amount will not be displayed.

Task 8: Submit Scheduled Outages

To submit a scheduled outage, follow the steps below.

Select **NRBTMG → Outages**

Select the current Compliance Year from **Compliance Year** drop down list.

Right click on the screen to display an **Add Outage** button. Click the **Add Outage** button. A row will appear in the table for the user to enter data in the following data fields.

Unit Name: The Unit Name. Select the Unit Name from the drop down list.

Outage Type: The outage type (Partial, Full). Select the Outage type from the drop down list.

Outage Start Time EPT: The outage start date/time in EPT. Enter an outage start date/time that is in the future .

Outage Stop Time EPT: The outage stop date/time in EPT. Enter an outage stop date/time that is in the future. The outage stop time entered may not result in the outage spanning across two compliance years. For example, an outage scheduled from September 1, 2021 09:00 to December 31, 2021 17:00 would need to be reported as two separate outages: one outage with outage start time of 09/01/2021 09:00 and outage stop time of 11/01/2021 00:00 and another outage with outage start time of 11/01/2021 00:00 and outage stop time of 12/31/2021 17:00.

Partial Outage MW: The partial outage MW for a Partial Outage. Enter the amount of MWs that will not be available during the Partial Outage. If a Full outage was selected, there will not be the ability to enter a MW amount.

When all the requested data has been entered, click the **Save** button to save the scheduled outage. Verify that an Outage ID was generated.

Updating a previously submitted outage:

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To update a previously submitted scheduled outage, click on the row to highlight the specific scheduled outage row. Enter the desired updated data in an editable data field.

Outage Start Time EPT: Enter an updated outage start date/time that is in the future. If the outage start/time is in the past, the outage start time may not be updated.

Outage Stop Time EPT: Enter an updated outage stop date/time that is in the future. If the outage stop time is in the past, the outage stop time may not be updated. The outage stop time entered may not result in the outage spanning across two compliance years. For example, an outage scheduled from September 1, 2021 09:00 to December 31, 2021 17:00 would need to be reported as two separate outages: one outage with outage start time of 09/01/2021 09:00 and outage stop time of 11/01/2021 00:00 and another outage with outage start time of 11/01/2021 00:00 and outage stop time of 12/31/2021 17:00.

Partial Outage MW: If the outage start time is in the future, enter the updated amount of MWs that will not be available during the Partial Outage. If the outage start time is in the past, entering an updated MW amount will prevent the updated outage information from being saved. If a Full outage was selected, there will not be the ability to enter a MW amount.

When all the updated data has been entered, click the **Save** button to save the updated scheduled outage information. A Success message will display if the updated data was successfully saved.

Removing a previously submitted outage:

To remove a future scheduled outage, click on the row to highlight the specific scheduled outage row. Right click on the highlighted row to display the **Remove Outage** option. Click on **Remove Outage**. Click the **Save** button to commit the removal of the scheduled outage to the database. A Success message will display if the future scheduled outage was successfully removed.

Task 9: View Expected Performance

The expected performance level of a NRBTMG unit for a November 1 through October 31 compliance year is calculated as the highest netting credit level realized for such unit for the prior November 1 through October 31 reporting year for generation output data, capped at the unit's netting capability value reported as of October 31 prior to the start of the compliance year. To view PJM's calculation of expected performance for a compliance year, follow the steps below.

Select **NRBTMG → Performance**

Select **Expected Performance** tab

Select the Compliance Year from **Compliance Year** drop down list

Based on the compliance year selected, a list of NRBTMG unit(s) and expected performance level(s) will be displayed in a table format. The following data columns are displayed in the table.

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Account Name: The LSE/EDC billing account short name that is responsible for reporting on NRBTMG located in the modeled wholesale area.

Unit ID: The unique identifier for the NRBTMG unit.

Unit Name: Select the Unit Name from the drop down list.

Zone: The transmission zone in which the modeled wholesale area is located.

Area: Name of modeled wholesale area in which the unit is located.

Netting Capability MW: The unit's netting capability value as of October 31 prior to the start of the compliance year.

Highest Output MW: The highest netting credit level realized in MW is the maximum hourly generation output level excluding any generation output participating in PJM Markets that was reported for such unit in the Coincident Peak Hours screen for the prior November 1 through October 31 reporting year.

Expected Performance MW: The expected performance level of a NRBTMG unit for a November 1 through October 31 compliance year is calculated as the Highest Output MW, capped at the unit's Netting Capability MW.

Task 10: View Event Performance

To view the event results for NRBTMG units that were subject to performance compliance, follow the steps below.

Select **NRBTMG → Performance** Select **Event Performance** tab

Select the Compliance Year from **Compliance Year** drop down list

Select the Event from **Events** drop down list

Based on the compliance year selected, the performance compliance event results for NRBTMG units that were subject to performance compliance will be displayed in a table format. The following data columns are displayed in the table.

Unit ID: The unique identifier for the NRBTMG unit.

Unit Name: The Unit Name from the drop down list.

Start Time: The start time of the event.

Stop Time: The stop time of the event.

Zone: The transmission zone in which the modeled wholesale area is located.

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Area: Name of modeled wholesale area in which the unit is located

Expected Performance MW: The expected performance level of a NRBTMG unit for the selected November 1 through October 31 compliance period.

Average Output MW: The average output over the period of the emergency event. The output of the NRBTMG unit during the emergency event is to be reported by the responsible LSE/EDC through the **Event Hours** tab in the Generation Output menu.

Excused MW Due to Scheduled Outages: The excused MWs due to scheduled outages. For performance compliance events during the months of October through May, excused MWs will be granted to a NRBTMG unit on a scheduled outage as reported to PJM in advance of the performance compliance event through the **Outages** screen. No excused MWs will be awarded for scheduled outages during the months of June through September since NRBTMG is not permitted to schedule outages in the months from June through September in accordance with the BTMG business rules in Manual 14D, Appendix A. The system calculates the excused MWs due to the reported scheduled outages.

Excused MW Due to Transmission Restriction: The excused MWs due to transmission restrictions. Excused MWs may also be granted due to transmission restrictions if the LSE/EDC can demonstrate to PJM that the unit was unable to generate at the expected performance level due to the actual wholesale area load level being served by the unit during the period of the performance compliance event and restrictions placed on the unit to prevent injections into the PJM transmission system. PJM will manual populate in the database the excused MWs due to transmission restrictions.

Unit Performance Shortfall MW: The unit's performance shortfall is calculated as the expected performance level minus the average output over the period of the emergency event minus any excused MWs.

Net Performance Shortfall: The net performance shortfalls (in MWs) for all units in the same wholesale area will display as a single row in the table that is applicable for a zone/area. For a performance compliance event, unit performance shortfalls for all NRBTMG units associated with the same wholesale area and located in the emergency action area are netted to determine if a net performance shortfall for the wholesale area. Positive net performance shortfall indicates failure of NRBTMG units in the wholesale area to perform and negative net performance shortfall indicates over-performance by NRBTMG units in the wholesale area. If the net performance shortfall for the wholesale area is positive, a netting reduction amount for the wholesale area is calculated for the event as 10% of the net performance shortfall.

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Task 11: View Netting Reduction

To view the total netting reduction amount for a wholesale area due to all the performance compliance events for a compliance period, follow the steps below.

Select **NRBTMG → Performance**

Select **Netting Reduction** tab

Select the Compliance Year from **Compliance Year** drop down list

Based on the compliance year selected, a list of Netting Reduction for the responsible LSE and EDC will be displayed in a table format. The following data columns are displayed in the table.

Zone: The transmission zone in which the modeled wholesale area is located.

Area: Name of modeled wholesale area in the zone.

Start Date: The start date of the selected November 1 through October 31 compliance period.

Stop Date: The stop date of the selected November 1 through October 31 compliance period.

Netting Reduction: The total netting reduction MW for a wholesale area due to all performance compliance events for the selected November 1 through October 31 compliance period.

Utilities

Utilities Overview

There are three tabs under the Utilities primary level navigation menu:

Submit XML Upload: Allows a user to submit data by uploading an XML formatted file.

Query XML Upload: Allows a user to query and download data by uploading an XML formatted file.

Transaction Log: Allows a user to view the status of an XML Upload.

Sample XML files are available on the Capacity Exchange section of the eTools page on PJM.com.

Task 1: Submit XML Upload

The following files are available to submit data:

- Submit Auction Sell Offers
- Submit Load Contribution

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- Submit Wholesale Area Load

To submit a Submit XML upload request, follow the steps below:

Select **Utilities**

Select **Submit XML Upload** tab

Click the **Browse…** button for your local directory to appear.

Select desired XML file from local directory.

Click the **Upload** button.

A Processing Status indicator displays when Submit XML Upload request is processing. Once the Submit XML Upload is finished, a Submit XML Upload response is displayed.

Submit XML Upload response can also be downloaded to local directory by clicking **Download Response** button on the bottom of the screen.

Task 2: Query XML Upload

The following files are available to query and download data:

- Query Daily Zonal Load NSPL
- Query Daily Zonal Load Obligation
- Query NSPL Summary
- Query Peak Load Summary
- Query Wholesale Area Load
- Query Zonal Load Obligation

To submit a Query XML Upload request, follow the steps below:

Select **Utilities**

Select **Query XML Upload** tab

Click the **Browse…** button for your local directory to appear.

Select desired file from your local directory.

Click the **Upload** button.

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A Processing Status indicator displays when Query XML Upload request is processing. Once the Query XML Upload is finished, a Query XML Upload response is displayed.

A Query XML Upload response can also be downloaded to local directory by clicking **Download Response** button on the bottom of the screen.

Task 3: View Status of XML Upload via Transaction Log

The status of Submit XML Upload and Query XML Upload requests can be viewed on **Transaction Log** tab. To view the status of an XML upload on the Transaction Log, follow the steps below:

Select **Utilities**

Select **Transaction Log** tab

Enter a desired date in the **Date** field

A list of transaction logs (submit or query requests) for the entered date are displayed in a table format. The following columns are displayed for each request and may be further filtered:

Event Time: The logged date/time of the Submit XML Upload or Query XML Upload request.

User Name: The user name that submitted the XML Upload request.

Participant Name: The short name of the company that submitted the XML Upload request.

Transaction Type: The type of XML Upload request. Submit displays for a Submit XML Upload request and Query displays for a Query XML Upload request.

Transaction Id: The unique identification number assigned to the Submit XML Upload or Query XML Upload request.

Request: Click **View Request** to view the XML Upload request.

Response: Click **View Response** to view the response to the XML Upload request.

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