Approval
Effective Date: 9/16/2013

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Current Revision

Revision 03(10/30/2014)
Updated user guide to include:
•   Explanation of Data Fields Section
•   Step by Step Instructions to enter in Nerc Compliance Details

Introduction
Welcome to the PJM User Guide for Resource Tracker. In this Introduction, you will find the following information:

•   What you can expect from the PJM Manuals in general (see —About PJM Manuals).
•   What you can expect from this PJM User Guide (see —About This User Guide).
•   How to use this User Guide (see —Using This User Guide).

About PJM Manuals
The PJM Manuals are the instructions, rules, procedures, and guidelines established by PJM for the operation, planning, and accounting requirements of the PJM RTO and the PJM Energy Market. The manuals are grouped under the following categories:

•   Transmission
•   PJM Energy Market
•   Generation and Transmission Interconnection
•   Reserve
•   Accounting and Billing
•   PJM Administrative Services

For a complete list of all PJM Manuals, go to www.pjm.com and select “Manuals” under the “Documents” pull down menu.
About This User Guide

The PJM User Guide for Resource Tracker focuses on the PJM Internet application, called “Resource Tracker”. Resource Tracker supports the maintenance of ownership information and provides the user the ability to review all sources of ownership information (Energy, Ancillary Services, Dispatching Agent, Marketing Agent, Physical Owner, Capacity, Offer Originator, Offer Originator Ultimate Parent, and Alternate Interested Party). Resource Tracker provides the user the ability to report discrepancies to PJM where they will be investigated and resolved.

Intended Audience References

The intended audiences for the PJM User Guide for Resource Tracker are:

- Generation Owners - All members with an Energy or Ancillary Service ownership share of a resource are required to confirm ownership information.
- Marketing Agents – Companies responsible for offering resources into the Energy or Ancillary Service Markets via eMKT.
- PJM Member Relations Department — The PJM Member Relations Department processes requests from Resource Owners to update ownership information and coordinates with other PJM departments to have such requests processed.

Using this User Guide

We believe that explaining concepts is just as important as presenting procedures. This philosophy is reflected in the way we organize the material in this user guide. We start each section with an overview. Then we present details, procedures or references to procedures found in other PJM user guides or PJM manuals. The following provides an orientation to this user guide’s structure.

What You Will Find in this User Guide

- A table of contents that lists two levels of subheadings within each of the sections
- An approval page that lists the required approvals and a brief outline of the current revision
- A section containing specific guidelines, requirements, or procedures including PJM actions and PJM Member actions
Section 1: Resource Tracker

Welcome to the Resource Tracker section of the PJM User Guide for Resource Tracker. Resource Tracker is an information system developed by PJM as an Internet-based application. It allows generation owners to provide and obtain information pertaining to generation ownership.

In this section you will find the following information:

- The Resource Tracker application functions (see “Resource Tracker Functions”)
- Log In Instructions (see “Log In”)
- A list of PJM rules and guidelines related to Ownership Confirmation (see “Rules and Guidelines”)
- How to navigate the application, confirm resource ownership information (see “Confirming Resources”)
- How to report erroneous ownership information (see “Reporting Discrepancies”)
- How discrepancies are resolved (see “Resolving Discrepancies”)

1.1 Resource Tracker Functions

The Resource Tracker application allows participants to view consolidated resource ownership information related to several PJM markets:

- Energy Ownership – the entity(ies) that receives shares of Energy (Real Time/Day Ahead) credits and associated credits/charges as recorded by PJM Settlements, Inc.

- Ancillary Services Ownership - the entity(ies) that receives shares of Ancillary Services (Day Ahead Scheduling Reserve, Operating Reserve, Regulation, Spinning Reserve) credits/charges as recorded by PJM Settlements, Inc.

- Capacity Ownership – the entity(ies) that has a share of owned MWs for capacity resources as reported by PJM eRPM. Note capacity ownership is based on Owned MW, not Committed MW.

- Nerc Compliance Details - the entity has to confirm that the Generator owner and Operator are in Compliance.

- Dispatching Agent – the entity directly responsible for the operation of a physical generation resource that would be contacted in the event PJM Dispatch requires immediate action as recorded by PJM’s eMKT application. Only one company can be named the dispatching entity for a given resource.

- Marketing Agent – the company responsible for offering the resource into the Energy or Ancillary Service Markets via eMKT. Only one company can be named the marketing entity for a given resource.

- Physical Owner – the owner of the physical plant and property, not necessarily a PJM member.
• Offer Originator – the company that is ultimately responsible for devising the strategy and/or determining the basis of the resource’s offers and offer parameters that are entered by the Marketing Agent into the Energy Market.

• Offer Originator Ultimate Parent – the entity that, directly or indirectly, owns or controls the offer originator; an entity that is at the top of the offer originator’s corporate structure.

• Alternate Interested Party – any contractual counterparty to a Tolling Agreement, Power Purchase Agreement, Operating Agreement, or other agreement (i.e. Declaration of Authority) for ownership of the energy output of the resource.

Participants are requested to confirm the resource ownership details are correct as reported by the Resource Tracker application twice a year (by June 1 and December 1). In the event data is incorrect, discrepancies should be reported. All reported discrepancies will be investigated and resolved by the PJM Member Relations group.

1.2 Log In and Application Roles

The Log In function provides security for the Resource Tracker application and databases by ensuring that only registered users have access to Resource Tracker. The Log In function also determines which parts of the application can be accessed by the user and which navigation options are available.

Resource Tracker Application Privileges

To access Resource Tracker, Market Participants must have a valid eSuite user account with one of the following roles assigned:

• Read Only - Users that only view resource ownership information

• Read/Write – Users that can confirm or report discrepancies for resource ownership information

1.3 Rules and Guidelines

The following is a list of business rules and guidelines to follow when working with Resource Tracker:

• All members with an Energy or Ancillary Service ownership share of a resource or are responsible for entering Energy offers into PJM’s systems are asked to confirm ownership information on a biannual basis (by June 1 and December 1).

• Individual unit statuses will change to “Expiring” ten business days prior to the established deadlines. If a confirmation has still not been logged within 5 business days of the deadline, an automated email will be sent daily to participants by the Resource Tracker application alerting that action is required.

• If ownership changes occur, or new resources are added after the Resource Tracker application goes live, registered users will receive an automated email from the Resource Tracker System alerting them confirmation is due within 2 business days.
- If no action is taken by the specified deadline, the status will change to “Expired”. An automated email will be sent to participants by the Resource Tracker application alerting that action is required.

- Once a company no longer has Energy or Ancillary Services share of a resource, the associated record in the Resource Tracker application will automatically be set to “Unit Ownership Terminated”. The company will no longer need to act on the record, but can refer to prior history for informational purposes.

- Any reported discrepancies will be resolved by PJM as soon as possible. There may be cases where the discrepancy is not resolved prior to the deadline; however this will not count against the member company. Members are asked to cooperate with PJM to supply corrected ownership values.

- The following process flow illustrates the general application flow:

1.4 Resource Tracker Dashboard

Upon user login to the Resource Tracker Application, the user will be directed to the dashboard.

- Resources are displayed based on the company the user account is linked to.
  - Users that have accounts across several companies must log in to each account separately.
- Each of the columns are able to be sorted and filtered

- Users may download ownership information for all resources tied to their account using the “Download” button at the top of the screen.
  
  - An excel file will be generated that lists the detailed ownership data reported in the application on a series of tabs:
    
    - Energy & Ancillary Service Ownership Information
    - Capacity Ownership Information
    - Physical Ownership Information
    - Marketing Entity and Dispatching Entity Information
    - Offer Entity Information

1.5 Explanation of Data Fields

- Information that is displayed in the Resource Tracker application is either user entered, or pulled directly from various source systems at PJM:
  
  - Energy and Ancillary Service ownership is displayed in the Unit Ownership Details section and is pulled from PJM’s settlement system. The ownership percent represents the share of financial settlement the given account receives. Only ownership shares belonging to the subaccount tied to the user’s account will be displayed.
  
  - Capacity ownership is displayed in the Capacity Ownership Details section and is pulled from PJM’s eRPM system. Only capacity owned by the subaccount tied to the user’s account will be displayed. The ownership percent is calculated using the Owned MWs only; RPM or FRR commitments are not considered in the displayed ownership percentage.
  
  - Physical Ownership Details are displayed in the Physical Ownership Details section. The Physical Owner is meant to capture the owner of the Property, Plant, and Equipment of the generator, and may not be a PJM Member. The original population of physical ownership utilized public sources available online, namely the EIA 860. Please pay special attention to the company listed and report a discrepancy if it needs to be updated.
  
  - Nerc Compliance Details is to certify that the Generator owner and generator Operator are in compliance with Nerc.
  
  - Marketing and Dispatching Agent details are displayed in the Unit Contact Information section and are pulled from PJM’s eMKT system.
- The Marketing Agent Company should designate the PJM subaccount responsible for entering the unit offer into eMKT. Please provide contact information that PJM Market Operations personnel can use in the event a question regarding Energy Market offers arises.

- The Dispatching Company should designate the company responsible for the dispatch of the unit. Please provide contact information that PJM Dispatch personnel can utilize in the event a question regarding the dispatch of a unit arises.

  - Offer Originator/Offer Originator Ultimate Parent details are displayed in the Offer Originator Information section and are provided by participants at the time of Resource Confirmation.

  - The Offer Originator should designate the company that is ultimately responsible for devising the strategy and/or determining the basis of the resource’s offers and offer parameters that are entered by the Marketing Agent into the Energy Market.

  - The Offer Originator Ultimate Parent should designate the entity that, directly or indirectly, owns or controls the offer originator; an entity that is at the top of the offer originator’s corporate structure.

  - Alternate Interested Party details are displayed in the Alternate Interested Party section and are provided by participants at the time of Resource Confirmation. Alternate Interested Party should designate any contractual counterparty to a Tolling Agreement, Power Purchase Agreement, Operating Agreement, or other agreement (i.e. Declaration of Authority) for ownership of the energy output of the resource.

1.6 How to Confirm Nerc Compliance Details

<table>
<thead>
<tr>
<th>Type</th>
<th>NERC# (Please select one)</th>
<th>Compliance Contact First Name</th>
<th>Compliance Contact Last Name</th>
<th>Compliance Contact Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generator Owner</td>
<td>Please select a NERC NCR# and NERC entity name</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generator Operator</td>
<td>Please select a NERC NCR# and NERC entity name</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Under the Generator owner drop down select a Nerc NCR# and Nerc entity name. Repeat that step under the Generator Operator. Fill in the Complaciance Contact information.
1.7 How to add Offer Originator, Offer Originator Ultimate Parent, and Alternate Interested Parties

When you first log in to the Resource Tracker application, the “Offer Originator Name” drop down list on the Resource Details screen will not have any options to select. It is a required field, and the data can be entered via the “Manage Company” link on the dashboard.

Once in this screen, click the “Add a company” button in the top right to create your Offer Originator(s), Offer Originator Ultimate Parent(s), and any Alternate Interested Parties. Type in the company name and Duns ID (if known), click Save, and it will be added to your Manage Company portfolio. Please note, the companies that are added on this screen are stored for your Organization. If the Offer Originator is the same for all units in your portfolio, you just need to create it once in the “Manage Company” screen and it will be available for each unit.

When you have added all Offer Originators, Ultimate Parents, and Alternate Interested Parties, click “Back” to go back to the dashboard.
In order to establish the parent/child relationship between your Offer Originator and Offer Originator Ultimate Parent, you must go to the “Manage Parent Company” screen on the dashboard.

Select the Offer Originator from the “Child Company” pull-down, and click the “Add Parent” button. In the “Add Parent Company” window, select the Offer Originator Ultimate Parent(s) from the pull-down and specify the ownership percentage. There may be multiple Offer Originator Ultimate Parents for an Offer Originator.
Now that the Offer Originator and Offer Originator Ultimate Parent mapping is established, the “Offer Originator Name” dropdown on the Resource Detail screen will be populated. Select your Offer Originator and the Ultimate Parent will automatically populate.

The Alternate Interested Party section can be populated by clicking the “Add an Interested Party” button and filling out the required information. The company that you created in the “Manage Company” screen will be available in the “Company Name” dropdown.

1.8 Confirming Resources

- Resource Owners must log into the Resource Tracker application to view each resource’s information.
- After logging into the Resource Tracker application, users should click on the pencil icon at the far right of the row to view individual resource ownership information.
• The Marketing Agent and Dispatching Agent contact information sections are editable. If the information is missing or inaccurate, users must update the details directly before confirming or reporting a discrepancy.

• Resources that have not yet been confirmed will not have Offer Originator, Offer Originator Ultimate Parent, and Alternate Interested Party populated. Users must enter the applicable entity names at the time of initial confirmation, and report any changes to the information initially supplied when applicable.
  
  o To facilitate population of these fields, a user-defined company list must be created and managed via the “Manage Company” link on the Resource Tracker dashboard. Please refer to section 1.6 for a step-by-step guide on how to populate the Manage Company screen.

  ▪ Users will have the ability to add or update entity names and parent affiliations.

  ▪ When assigning the Offer Originator, Offer Originator Ultimate Parent, and Alternate Interested Party Company in the Resource Details screen, the user-created entities names will be displayed via a drop down menu in their respective locations.

  ▪ Entity names and parent affiliations entered via the “Manage Company” screen will be available to be selected in the Resource Details screen for all units belonging to the user’s company.

• If all ownership information (Energy and Ancillary Services, Capacity, Physical, Marketing Agent Company, Dispatching Agent Company, Offer Originator, Offer Originator Ultimate Parent, and Alternate Interested Party) is accurate, the user should choose the “I certify that the above information is complete and accurate” option and click the “Submit” button.

1.9 Bulk Confirmation of Resources

• In the event a user is certain that the data reported in the Resource Tracker application is accurate for a number of resources, a bulk confirmation feature is available to simplify the confirmation process.

• Because some of the data reported in the application is initially entered by the user, bulk confirmation is only available for resources that have been previously confirmed.

• Resources eligible for bulk confirmation will have a checkbox available for selection under the “Select for Bulk Confirmation” heading on the Resource Tracker Dashboard.

• Users should select all units they wish to confirm, and select the “Bulk Confirmation” button at the top of the screen to submit the resources as confirmed.

• By clicking “Submit,” the user is confirming all data related to the selected units.

• Discrepancies cannot be reported via bulk confirmation.
1.10 Reporting Discrepancies

- If the user does not agree with the ownership information (Energy and Ancillary Services, Capacity, Physical, Marketing Agent Company, Dispatching Agent Company, Offer Originator, Offer Originator Ultimate Parent, or Alternate Interested Party) presented via the Resource Tracker System, the user should note the incorrect data elements and the correct values in the “Discrepancy Description” text box. By clicking “Submit,” the user is confirming all other data related to the unit. When discrepancies are reported, an automated email will be sent to the PJM Client Managers via the Resource Tracker System alerting them of the reported discrepancy. Client Managers will follow up on reported discrepancies on an individual basis.

- Any reported discrepancies will be resolved by PJM as soon as possible. There may be cases where the discrepancy is not resolved prior to the deadline; however this will not count against the member company. Members are asked to cooperate with PJM to supply corrected ownership values.

1.11 Resolving Discrepancies

- Upon resolution of a discrepancy, the Client Manager will change the status of the record in the Resource Tracker System to “Discrepancy Resolved”. Users will receive an email stating when a discrepancy has been resolved.

1.12 Viewing Confirmation History

- Users can view the complete unit confirmation history by clicking on the “document” icon at the right of each resource’s row.

- A list of the history for the specific resource will be listed along with the time each action was logged by the Resource Tracker Tool.

Revision History

Revision 01 (09/26/2013)

This is the first release of the PJM User Guide for Resource Tracker.

Revision 02 (11/21/2013)

Updated User Guide to include:

- Explanation of Data Fields Section
- Step by Step Instructions to Create Offer Entity and Offer Entity Parent Mapping

Revision 03 (10/30/2014)

Updated user guide to include:

- Explanation of Data Fields Section
- Step by Step Instructions to enter in Nerc Compliance Details