



Markets Gateway Roadmap

As of July 23, 2019

Action Required	Deadline	Who May Be Affected
Resource Limitation Reporting & Tracking – become familiar with new screen, refer to new version of External Interface Spec. to adjust XML queries	August 15	Markets Gateway UI & XML Users



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Resource Limitation Reporting & Tracking								◆ TRN – Aug. 1 ◆ PRD – Aug. 15				



Current Issue

- Many generation units in PJM have limitations on how many hours they are able to run in a given time period. These limitations are often related to compliance with environmental permits, fuel availability, and demineralized water availability.
- These limitations are dynamic, and the hours a unit has left heavily depends upon how often a unit has been running, which schedule and fuel the unit is running on, and how often the unit is being cycled.
- The current methods PJM uses to track resource limitations produce information for a snapshot in time and, importantly, are not linked to actual unit run time.

Resolution Overview

- The proposed upgrades are intended to provide more dynamic notice to dispatch if a unit is running close to its limitations, and will include a calculation of estimated hours remaining using member-entered hours remaining due to a limitation and unit runtime.
- Related changes to Manual 13 are currently in the stakeholder process (final approval scheduled for 7/25 MRC):
 - If a unit has less than 72 hours of run time at maximum capacity due to any resource limitation (primary or alternate fuel, emissions, demineralized or cooling water, other consumables), it along with any fuel limited units should be reported to PJM through the “Resource Limitations” page of Markets Gateway
 - The information on the “Resource Limitations” page is used for situational awareness and multi-day operations planning. The parameters entered on this page **are not** utilized in the Day-Ahead or Real-Time Market clearing engines
 - Any unit with less than 24 hours of run time remaining due to resource limitations should also update the Max Run fields in Markets Gateway
- It is understood that the resulting calculations are estimates and are used purely for operational awareness and improved communication between Dispatch and generation owners about these types of limitations. The rules pertaining to Capacity Performance do not change

Changes Users Will See

- Operational Restrictions will be moved from Generator > Schedules > Restrictions Information to Generator > Resource Limitations. (Except “Operational Restriction Other” since this is used for Capacity Performance Exception)
- Resources will have the ability to enter unit level or fuel level limitation information
- Users will enter the following information:
 - Limitation Start Date
 - Limitation Start Time
 - Limitation End Date
 - Limitation End Time
 - Hours Remaining at Full Load
 - Replenished Hours at Limitation End Date
 - PJM Estimated Hours Remaining

Status

- Train install planned for August 1
- Production planned for August 15
- External Interface Specification is posted on Markets Gateway page



Updated Generator > Schedules > Restrictions Information

- Bilaterals
- Con Edison
- Demand
- ▶ Demand Response
- ▼ Generator
 - Unit
 - Schedules**
 - Dispatch Lambda
 - Market Results
 - Regulation Market
 - Synchronized Reserve Mar
 - Day-Ahead Scheduling Res
 - Unit Limitations
- Interface Pricing
- Opportunity Cost Calculator
- Parameter Limits
- Price Responsive Demand
- Pseudo Tie Transaction
- ▶ Public
 - System Utilities
 - Up-To-Transaction
 - Virtual
 - Weather Forecast

Market Day Portfolio Location Schedule

Offers Offer Updates Detail Detail Updates Manager Selection Availability Update **Restriction Information** TPS Schedule Switch

Last Updated Date/Time:

Operational Restrictions

Operational Restriction Other

Dual Fuel

Dual Fuel Availability MW's to Transition

Time to Transition (mins)

Pipeline Switching

Pipeline A	<input type="text"/>	A to B Transition Time (mins)	<input type="text"/>
Pipeline B	<input type="text"/>	A to B Transition MW	<input type="text"/>
Pipeline C	<input type="text"/>	A to C Transition Time (mins)	<input type="text"/>
Pipeline D	<input type="text"/>	A to C Transition MW	<input type="text"/>
		A to D Transition Time (mins)	<input type="text"/>
		A to D Transition MW	<input type="text"/>

Gas Day Nominations (Beginning 10:00AM of Market Day)

Pipeline/LDC Name	Type	Current Firm Nomination (Dths)	Current Total Nomination (Dths)	No Nomination Reason
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- Bilaterals
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Start Day End Day Portfolio Location

Limitation ID	Location	Fuel Type	Limitation Type	Start Time	End Time	Hrs. Remaining at Full Load	Replenished Hrs. at Limit. End	Is Unlimited at Reduced Output	PJM Est. Hrs. Remaining
Show all	Show All	Show All	Show All	Show all	Show all	Show all	Show all	Show All	Show all
<input type="checkbox"/>									

“Unit Level” Limitations

- Limitation Type: Cooling Water, Demineralized Water, or Other Consumables

“Fuel Level” Limitations

- Select Fuel Type related to limitation
- Limitation Type: Emissions, Onsite Fuel

Enter hours remaining at full load between limitation start and end times

Enter additional hours at full after end time (e.g. from fuel delivery or roll-over of emissions hours)

Yes or No

Calculation using actual on hours to count down Member-entered “Hrs. Remaining at Full Load” to create a dynamic estimate of runtime remaining due to a limitation



Product Details

[Markets Gateway](#) allows users to submit information and obtain data needed to conduct business in the Day-Ahead, Regulation and Synchronized Reserve Markets.

Key Product Features

- View Market Results
- Manage Generation and Load Response Portfolios
- Manage Ancillary Service Data
- Manage Market Offers and Transactions