Markets Gateway Roadmap

As of May 22, 2018
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
### 2018 Markets Gateway Roadmap

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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</thead>
<tbody>
<tr>
<td>ALL added to XML query</td>
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<tr>
<td>Order 831 Offer Verif. (auto)</td>
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<tr>
<td>Soak time</td>
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<tr>
<td>Minrun time, Notification time</td>
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</tbody>
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**Legend**
- Green circle: Start Date
- Green diamond: End Date

- **Train and Prod: 6/21**
- **Prod: 7/20**
- **Q3**
Several participants have requested adding ‘ALL’ to the following new IDO queries:
- QueryScheduleUpdate
- QueryScheduleDetailUpdate

The new IDO queries currently have the "location" and "schedule" as required attributes, which forces users to query every location/schedule combination in order to obtain a complete set of the data submitted to the market.

Target timeframe – June 21 for Train and Production

External Interface Specification Guide, v56 and XSD information is posted on the Markets Gateway Tools page

<table>
<thead>
<tr>
<th>Area</th>
<th>Impact</th>
<th>Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browserless (XML API)</td>
<td>New XML Query Option Available for some queries</td>
<td>None - optional functionality. Users may update XML calls for the above queries after the production release.</td>
</tr>
</tbody>
</table>
On April 2nd, Order 831 – Offer Verification was approved by FERC, with an implementation date 10 days later (April 12)

Starting with the April 12 Market Day, the incremental energy offer price cap in Markets Gateway changed to $1,000/MWh (from $2,000/MWh) for all schedules (Cost-based, Priced-based, and Price PLS schedules), for both daily and hourly offers (Generator > Schedule > Offer and Generator > Schedule > Offer Details)

As discussed previously, PJM has implemented a manual process for the verification of all incremental cost-based offers over $1000, which became effective with the April 12 Market Day

If you anticipate the need to submit a Cost-based offer over $1,000 please become familiar with the Offer Screening and Exception Process by reviewing the Offer Verification Instructions and Guidelines on the Offer Verification Webpage

Participant submits offer curve via Markets Gateway or XML, where all desired segments greater than $1,000/MWh, are set equal to $1,000/MWh.

Participant fills out template and submits via Sharepoint site

PJM evaluates information and communicates segments approved

Participant resubmits offer curve via Markets Gateway or XML reflecting the approved segments values

Automated process targeted for mid to late July
Soak Time

• In preparation for the future implementation of soak time, certain parameters will be added to Markets Gateway for data collection purposes only

• Cold, intermediate and hot soak time data fields will be added on the Generator > Schedules > Detail screen in Markets Gateway to the Time section

• Soak time is defined as the minimum number of hours a unit must run from the time after generator breaker closure (MWs greater than 0) to the time the unit is dispatchable

• Participants will not be required to enter this information

• Target implementation (UI and XML): Q’3 2018
On April 5th, PJM made some adjustments in Markets Gateway to min run time and notification time update times to bring them into alignment with the Intraday Offers Manual 11 language which stated updates specifying hourly differentiated values may only be submitted starting at 1830 day-ahead.

Subsequent to the change, participants expressed a desire to restore the previous submission timing for the Min Run and Notification Time parameters for operational flexibility.

In response, Manual 11 changes were presented and approved at the May 2 MIC that remove language that details when hourly updates can be submitted for min run time and notification time parameters, and clarify that hourly differentiated values will be used in RT only (so disregarded in the DA market clearing).

If the changes are approved at the May 24 MRC, PJM will work with our vendor to restore input of hourly differentiated min run time and notification time prior to DA close and during the rebid period (as well as starting at 1830 day-ahead).

Target implementation (UI and XML): Q’3 2018
Capacity Performance Update
Parameter Applicability

<table>
<thead>
<tr>
<th>Applicable Delivery Years</th>
<th>15/16</th>
<th>16/17</th>
<th>17/18</th>
<th>18/19</th>
<th>19/20</th>
<th>20/21+</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS Values</td>
<td></td>
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</tr>
<tr>
<td>Default</td>
<td>Annual</td>
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<td></td>
<td>Annual FRR Only</td>
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<td></td>
</tr>
<tr>
<td>Unit Specific or Adjusted Unit Specific</td>
<td>CP</td>
<td>CP</td>
<td>CP Base</td>
<td>CP Base</td>
<td>CP</td>
<td></td>
</tr>
</tbody>
</table>

- Exceptions may apply regardless of whether the PLS is default, unit specific, or adjusted unit specific
  - Temporary – less than 30 days
  - Period – 31 days to a year
  - Persistent – greater than a year

Base Capacity Resources subject to USP starting 6/1/2018
<table>
<thead>
<tr>
<th>DY 2018/19</th>
<th>Applicable Limits</th>
<th>Consideration of Price PLS in DA/Dispatch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity Performance</td>
<td>USP</td>
<td>Max Gen Emer/Max Gen Emer Alert/HWA/CWA/ Anticipated Actions*</td>
</tr>
<tr>
<td>Base Capacity</td>
<td>USP</td>
<td><em>June - September</em> Max Gen Emer/Max Gen Emer Alert/HWA/ Anticipated Actions*</td>
</tr>
<tr>
<td>Fixed Resource Requirement</td>
<td>PLS Default</td>
<td>Max Gen Emer/Max Gen Emer Alert/Anticipated Actions*</td>
</tr>
<tr>
<td>(FRR)</td>
<td></td>
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</tr>
<tr>
<td>Energy Only</td>
<td>N/A</td>
<td>N/A</td>
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</tbody>
</table>

*Refer to OATT, Attachment K Appendix, Sec 6.6 Minimum Generator Operating Parameters
• Market Sellers must review Price-PLS and Cost-Based schedule parameters for the June 1 market day
  – Ensure they conform to values listed in the associated “Limit” fields.
  – June 1 market day will be updatable on Friday, May 25 through Thursday, May 31 at 1030.
  – Any updates made for the June 1 market day will carry forward to future market days.
  – Markets Gateway will reject updates to schedule availability if PLS schedule parameters do not comply with the new limits
Turndown Ratio is a function of the specified Eco Min and Eco Max