PJM Queue Position Establishment Background and Support for Problem Statement

Presented by David Egan
Manager, Interconnection Projects
To the PJM Planning Committee
June 11, 2015
Overview

• Establishing a Queue Position Background
  • Types of New Service Requests and Agreements
  • Queue Receipt Windows
  • Non-Refundable Deposits
  • Refundable Deposits (a/k/a Initial Deposits)
  • Assigning of a Queue Position
  • Timing for Request Validity (a/k/a Deficiency Review)
  • Deficiency Types
  • Deficiency Cure Period
  • Uncured Deficiencies
  • Scoping Meetings
  • Feasibility Study Timing

• Examples and Support for Problem Statement
New Service Request Types and Agreements

- **Generation Interconnection** - Tariff §36.1.01 (large gen) and §36.1.02 (small gen)
  - Tariff Attachment N (Generation > 2 MW or any Capacity Request)
  - Tariff Attachment Y (Small Generation ≤ 2 MW; ≤ 5 MW inverter-based)
  - Tariff Attachment BB (Inverter-based ≤ 10 kW)
- **Transmission Interconnection** - Tariff §36.1.03
  - Tariff Attachment S
- **Upgrade Requests** - Tariff §204.2
  - Tariff Attachment EE & Attachment N-1
- **Long Term Firm Transmission Service** - Tariff §204.1
  - Tariff Attachment FF & Attachment N-1
Queue Receipt Windows

- New Service Requests are received during six-month queue windows per Tariff §36.2:
  - For Interconnection Requests received during the six-month period ending October 31 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by the last day of February.
  - For Interconnection Requests received during the six-month period ending April 30 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by August 31.
Queue Non-Refundable Deposits

- Non-refundable deposits vary by month received per §36.1.01:
  - a base non-refundable deposit of $10,000, if the Generation Interconnection Request is received in the first four calendar months of the current New Services Queue;
  - a base non-refundable deposit of $20,000 if the Generation Interconnection Request is received in the fifth calendar month of the current New Services Queue; or
  - a base nonrefundable deposit of $30,000, if the Generation Interconnection Request is received in the sixth calendar month of the current New Services Queue.

- Any remaining non-refundable deposit monies will be credited toward the Interconnection Customer’s cost responsibility for any other studies conducted for that Interconnection Request under Part VI of the Tariff, which will be applied prior to the deposit monies collected for that other study. If any non-refundable deposit monies remain after all studies are complete, such monies will be returned to a Generation Interconnection Customer upon Initial Operation.
Queue Refundable Deposits (a/k/a Initial Deposit)

- Refundable deposits vary by month received & project size per §36.1.01:
  - an initial deposit of $100 for each MW requested if the Generation Interconnection Request is received in the first four calendar months of the current New Services Queue;
  - an initial deposit in the amount of $150 for each MW requested if the Generation Interconnection Request is received in the fifth calendar month of the current New Services Queue; or
  - an initial deposit in the amount of $200 for each MW requested, if the Generation Interconnection Request is received in the sixth calendar month of the current New Services Queue;
  - provided, however, that the maximum initial deposit for a Generation Interconnection Request will be $100,000 regardless of both the size and timing of such request
  - Upon completion of the Feasibility Study, the Transmission Provider will return any unused refundable deposit monies to Interconnection Customer.
Assigning of a Queue Position

• Based upon date of receipt regardless of validity of request on that date per Tariff §36.1.4:
  – Upon timely correction of the deficiency, the Interconnection Request shall be assigned a Queue Position under Section 201 as of the date that Transmission Provider first received the request.

• Deposit must be provided to establish the queue position per Tariff §36.1.4
  – Notwithstanding the above, the Interconnection Customer must submit its deposit at the time it submits its Interconnection Request. Failure to do so will result in rejection of the Interconnection Request.
PJM Review of Request Validity (a/k/a Deficiency Review)

- PJM has 5 business days from receipt to access validity of request per Tariff §36.1.4:
  - If an Interconnection Request fails to meet the requirements set forth in Section 36.1, except as provided below regarding the deposit, or is in arrears as described above, the Transmission Provider shall so notify the Interconnection Customer (electronically when available to all parties, otherwise written) within five (5) business days of receipt of the initial Interconnection Request.
Possible Request Deficiencies

- Deficiencies per Tariff §36.1.4 and §36.1:
  - An Interconnection Request will not be considered a valid request if Interconnection Customer has failed to pay any outstanding invoices related to prior Interconnection Requests by the Interconnection Customer; or
  - until all information required under Section 36.1 has been received by the Transmission Provider:
    - the location of the proposed generating unit site or existing generating unit;
    - evidence of site control;
    - new capability or recovery of lost rights;
    - a description of the equipment configuration;
    - the planned in service date (≤ 7 years from request);
    - data and single line per PJM Manuals; and
    - an executed Generation Interconnection Feasibility Study Agreement with the initial deposit and non-refundable deposit.
Deficiency Cure Period

- Customers have 10 business days to clear deficiencies per Tariff §36.1.4:
  - Interconnection Customer shall provide the additional information that Transmission Provider’s notice identifies as needed to constitute a valid request and shall make any payments on any outstanding invoices within ten (10) business days after receipt of such notice.

- Note that the Tariff does not provide a time period for PJM to review the revised submittals, but we apply the 5 day requirement.
Tariff Requirements – Large Generation

Uncured Deficiencies

• Requests that do not clear deficiencies are withdrawn per Tariff §36.1.4:
  – In the event the Interconnection Customer fails to provide the further information and make payments on any outstanding invoices required by Transmission Provider's deficiency notice under this Section 36.1.4, its Interconnection Request shall be deemed to be terminated and withdrawn.

• All deficiency review costs incurred by PJM for queues that do not become valid are socialized to PJM membership. PJM cannot draw on non-refundable or initial deposits until the request is deemed valid.
Scoping Meeting Timing

• PJM has seven days to offer three meeting times for the scoping meeting. The maximum date for the meeting varies by the queue receipt month per Tariff §36.1.5:
  – After receipt of a valid Interconnection Request, Transmission Provider shall offer to arrange, within seven business days, for the scoping meeting, and shall provide a minimum of three suggested meeting dates and times for the scoping meeting.
  – The scoping meeting shall be held, or waived by mutual agreement of the parties:
    - within 45 days after receipt of a valid Interconnection Request, if the Interconnection Request is received in the first four calendar months of the current New Services Queue; or
    - within 30 days if the Interconnection Request is received within the fifth calendar month of the current New Services Queue; or
    - in 20 days if the Interconnection Request is received in the sixth calendar month of the date of the beginning of the current New Services Queue.
Feasibility Study Timing

Tariff §36.2 anticipates all Scoping Meetings and modeling are completed in the month following the queue closure:

– Following the closure of an interconnection queue on October 31 and April 30, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on December 1 and June 1, respectively.
Last Day of Month Timing Example

Tariff Deficiency and Scoping Meeting Timing
Month 4

<table>
<thead>
<tr>
<th>Month 4</th>
<th>Month 5</th>
<th>Month 6</th>
<th>Model Build Month</th>
<th>Expected Study Start</th>
<th>Study Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Feb</td>
<td>1-Mar</td>
<td>1-Apr</td>
<td>1-May</td>
<td>45 days</td>
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</tbody>
</table>

Deficiency Review
Deficiency Core
Deficiency Review
Scoping Meeting Window
### Tariff Deficiency and Scoping Meeting Timing
#### Month 5

<table>
<thead>
<tr>
<th>Month 4</th>
<th>Month 5</th>
<th>Month 6</th>
<th>Model Build Month</th>
<th>Expected Study Start</th>
<th>Study Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Feb</td>
<td>1-Mar</td>
<td>1-Apr</td>
<td>Deficiency Review</td>
<td>Deficiency Core</td>
<td>Scoping Meeting Window</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-May</td>
<td>Deficiency Review</td>
<td>30 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-Jun</td>
<td></td>
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<td></td>
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<td>1-Jul</td>
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<td></td>
<td>1-Aug</td>
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</tr>
</tbody>
</table>
## Tariff Deficiency and Scoping Meeting Timing

### Month 6

<table>
<thead>
<tr>
<th>Month 4</th>
<th>Month 5</th>
<th>Month 6</th>
<th>Model Build Month</th>
<th>Expected Study Start</th>
<th>Study Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Feb</td>
<td>1-Mar</td>
<td>1-Apr</td>
<td>1-May</td>
<td>1-Jun</td>
<td>1-Jul</td>
</tr>
</tbody>
</table>

- **Deficiency Review**: 20 days
- **Deficiency Cure**: 20 days
- **Deficiency Review**: 20 days
- **Scoping Meeting**: 20 days

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Last Day of Month Timing Example
Deficiencies by Month of Queue
Summary of Queue Entry Issues

- Current Tariff Requirements Not Adequately Dissuading Late Queue Entry;
- Current Fee Structure is Complicated with Little Benefit;
- Tariff Anticipates and Permits Deficient Requests;
- End of Queue Requests are the Most Likely to be Deficient;
- PJM Members Socialize Costs for Uncured Requests;
- Tariff Deficiency and Scoping Meeting Timing Durations Conflict with Feasibility Study Start Requirement;
- Deficient Requests Delay Study of Well-Planned Requests; and
- Feasibility Study Completion is a Fixed Date.