5-Minute Settlements

As of July 2017
• FERC Order 825 – Sub-Hourly Settlements
  – Align settlement and dispatch intervals by:
    • Settling energy transactions in its real-time markets at the same time interval it dispatches energy
    • Settling operating reserves transactions in its real-time markets at the same time interval it prices operating reserves
    • Settling intertie transactions in the same time interval it schedules intertie transactions
  – Final Rule issued June 16, 2016
  – Compliance Filing submitted January 11, 2017
• Align prices with resource dispatch instructions and operating needs, providing appropriate incentives for resource performance
5-Minute Settlements Roadmap

<table>
<thead>
<tr>
<th>Q1 2017</th>
<th>Q2 2017</th>
<th>Q3 2017</th>
<th>Q4 2017</th>
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<tr>
<td>PJM Compliance Filing</td>
<td>Design, Development, Testing</td>
<td>Training Implementation</td>
<td>Production Implementation</td>
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- **5-Minute Settlements**

  - **Obtain Member Feedback on App Changes**
  - **Communicate Power Meter Changes**
  - **Communicate MSRS Changes**
  - **Aug. 1**
  - **Proposed Impl. Date: Feb 1, 2018**

- **Information on MSRS report changes available August 1**
  - Comprehensive list of changes, new reports and reports that will become obsolete can be found online: [http://pjm.com/markets-and-operations/billing-settlements-and-credit/msrs-reports-documentation.aspx](http://pjm.com/markets-and-operations/billing-settlements-and-credit/msrs-reports-documentation.aspx)
  - Report documentation is being posted now and will continue over the next few months.
Question from June Tech Change forum

- Question: Are there any places where member companies will have to make IT changes besides Power Meter?
- Answer: No. There are no other areas that have been identified beyond the Power Meter changes and any changes necessary to consume modified/deleted/additional reports.
System Changes

- Market Settlement Calculation System (MSCS)
- Market Settlement Reporting System (MSRS)
  - New 5 Minute reports
  - Minimize changes to current hourly reports
- Power Meter
  - Accept 5 minute meter data (though not required)