

## Gas Unit Commitment Coordination

*Includes Problem/Opportunity Statement*

### Issue Source

This issue emanates from the difficulties experienced in scheduling gas-fired generation during cold weather events, most recently during the cold weather events of January 2014 and some of the issues identified by PJM and Generation Owners.

### Stakeholder Group Assignment

The issue will be addressed at the Operating Committee (OC) with assistance from the Market Implementation Committee (MIC) as appropriate. The approval authority will ultimately rest with the Markets and Reliability Committee (MRC).

### Key Work Activities

- 1) Education on gas scheduling and coordination issues experienced
- 2) Development of Design Components of a solution.
- 3) Development of solution packages to address the identified issues.

Any solution should consider:

- PJM unit commitment practices for units requiring significant advance notice for fuel procurement and more generally, long lead unit commitment procedures for units with greater than 24 hour startup and notification times.
- Methods to ensure long lead generation commitments are accurately reflected in Day- Ahead market.
- Flexibility of generator startup time and notification time data fields in unit offer data. Can the existing data fields accurately model the situations seen in January? Do the existing market rules support this?
- Ability to track dual fuel capability and availability in real-time, including requirements and rules for a generator to switch schedules
- How the following are defined and considered:
  - o Economic vs. reliability outages
  - o Outages that impact Equivalent Forced Outage Rate Peak (EFORp)
  - o Outages considered out of management control
- Requirements and tools for managing limited fuel availability (to include units whose primary fuel may not be natural gas but that require gas to start) and unit flexibility parameters (e.g. units that may be able to get some gas to run during peak hours only) PJM "Cancellation Costs" recovery for generators cancelled prior to expected run times in real time

- "Firmness" of PJM operator unit commitment decisions outside of Day-Ahead market (focus on communications).
- Obligations of PJM capacity units with respect to fuel availability

Any solutions to these issues will need to be coordinated with any FERC action pending on similar cases currently before the FERC.

### **Expected Deliverables**

- 1) Manual changes
- 2) Potential changes to eMKT or other PJM tools
- 3) Potential OA or OATT changes

### **Expected Overall Duration of Work**

The expectation is to get some short term changes implemented prior to the winter of 2014/2015. Some longer term changes that may require FERC action may extend into early 2015.

### **Decision-Making Method**

Tier 1, consensus (unanimity) on a single proposal is the preferred decision-making method with Tier 2 (multiple alternatives) being used if consensus cannot be reached.