



Gas Unit Commitment Coordination

2012 Notification and Start Up Issue Review

February 10, 2015

1/19/11

MRC Approved Problem Statement

- “... extended notification and start times have the potential to create reliability and market issues.
- Unit start time and notification time parameters are not currently limited by any market rules...”

4/12/11

OC Endorsed Solution Reviewed at MIC

- OC was charged with determining a minimum set of operational/ reliability requirements

3/14/12

OC/MIC Joint Solution Endorsed at MIC

- *0 objections/0 abstentions*
- Extended Cold Notification/Startup Time Parameters
- Notification/Startup Alert
- Notification/Startup Time Parameter Obligations - Extended Lead Time
- Peak / Off Peak Periods
- PJM Operators Actions
- Economic Indicator
- Notification/Startup Time Parameter Approval/Change Process
- Notification/Startup Time Parameter Obligations
- Safe Harbor
- Short Lead Time Startup Cost Offers

6/28/12

MRC Endorsed M10,M13,M14D Revisions

- Added new Section 1.4 (M10) and revisions to M13, M14D: Unit Start-up Notification – Section defined purpose of Unit Start-up Notification, what happens when PJM issues a notification / start-up alert, and required notification plus start-up time requirements for Peak Period and Off-Peak Periods.

ALL ITEMS IN PROPOSAL

- Extended Cold Notification/Startup Time Parameters
- Notification/Startup Alert
- Notification/Startup Time Parameter Obligations - Extended Lead Time
- Peak / Off Peak Periods
- PJM Operators Actions

IMPLEMENTED ITEMS

- Extended Cold Notification/Startup Time Parameters
- Notification/Startup Alert
- Notification/Startup Time Parameter Obligations - Extended Lead Time
- Peak / Off Peak Periods
- PJM Operators Actions

NOT IMPLEMENTED

- X
- Economic Indicator
- Notification/Startup Time Parameter Approval/Change Process
- Notification/Startup Time Parameter Obligations
- Safe Harbor
- Short Lead Time Startup Cost Offers

Details For Items Which Have Not Been Implemented

Economic Indicator

- MMU proposed publishing an economic indicator in eMKT that would indicate to generation owners on whether MMU anticipates the unit will be economic or uneconomic

Notification/Startup Time Parameter Approval/Change Process

- MMU/PJM and generator owner will work together to define the mutually agreed initial individual unit performance parameter and bandwidth

Notification/Startup Time Parameter Obligations

- During off-peak periods units may offer extended notification times as long as those times accurately reflect the physical time to bring the unit to the beginning of the unit startup sequence.

Safe Harbor

- “Safe Harbor” status is for steam-type units which do not need to be evaluated by the notification/startup process because their notification+ startup time do not affect how PJM would schedule them even with the proposed changes.

Short Lead Time Startup Cost Offers

- This item will be referred to the CDS for discussion. This item will provide additional flexibility to cost schedule so that the cost of shortening Notification/Startup time can be included in the cost-based startup cost.” .

Milestone	Deadline	Rule
Manual Approval	Deadline A	<ul style="list-style-type: none"> Price-based and cost-based offers shall have the same notification and startup times (taking into account fuel types / or different startup costs) Notification/startup times shall remain not limited by eMKT.
Unit Specific Parameter Submittal	Deadline B	<ul style="list-style-type: none"> Market Sellers submit unit specific notification and startup times to PJM and the MMU Submission Interface: eMKT / Template to PJM/MMU email
MMU Determination	Deadline C	<ul style="list-style-type: none"> MMU communicates its determination to Market Sellers and PJM
PJM Determination	Deadline D	<ul style="list-style-type: none"> PJM communicates its determination to Market Sellers and MMU

- Parameter changes
 - Temporary: Similar to current PLS exception process. Change will be accepted unless documentation is not provided in time. PJM/MMU will make determination in **[to be determined]** days.
 - Persistent: is a change lasting for more than 31 days
 - Market Sellers can transition a temporary change to a persistent change.

- eMKT will not limit Market Sellers' ability to submit any notification/startup time, before, during and after unit specific parameter determination by PJM and the MMU.
- Notification and startup times shall be the same for price-based and cost-based energy offers (based on fuel type).

- Intended for units with notification/startup time that do not impact markets/operations
 - Nuclear
 - Hydro
 - Solar
 - Wind

- The MMU is working on a methodology to present to stakeholders.