

Notification and Start Up Issue Review

Market Implementation Committee February 11, 2015 Joe Ciabattoni Manager, Markets Coordination

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2012 Notification and Startup Issue History

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 revisions

 Added new Section 1.4: 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.



2012 Notification and Startup Issue Implementation Status

ALL ITEMS IN PROPOSAL	IMPLEMENTED ITEMS	NOT IMPLEMENTED
 Extended Cold Notification/Startup Time Parameters Notification/Startup Alert Notification/Startup Time Parameter Obligations - Extended Lead Time Peak / Off Peak Periods PJM Operators Actions 	 Extended Cold Notification/Startup Time Parameters Notification/Startup Alert Notification/Startup Time Parameter Obligations - Extended Lead Time Peak / Off Peak Periods PJM Operators Actions 	•X
 Economic Indicator Notification/Startup Time Parameter Approval/Change Process Notification/Startup Time Parameter Obligations Safe Harbor Short Lead Time Startup Cost Offers 		 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 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 times 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 that the cost of shortening startup time can be included in the cost-based startup cost.



Lead Time Approval Process

Milestone	Deadline	Rule
Manual Approval	Deadline A	 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	 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	MMU communicates its determination to Market Sellers and PJM
PJM Determination	Deadline D	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: Similar to current PLS exception.

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.