# PJM Manual 11

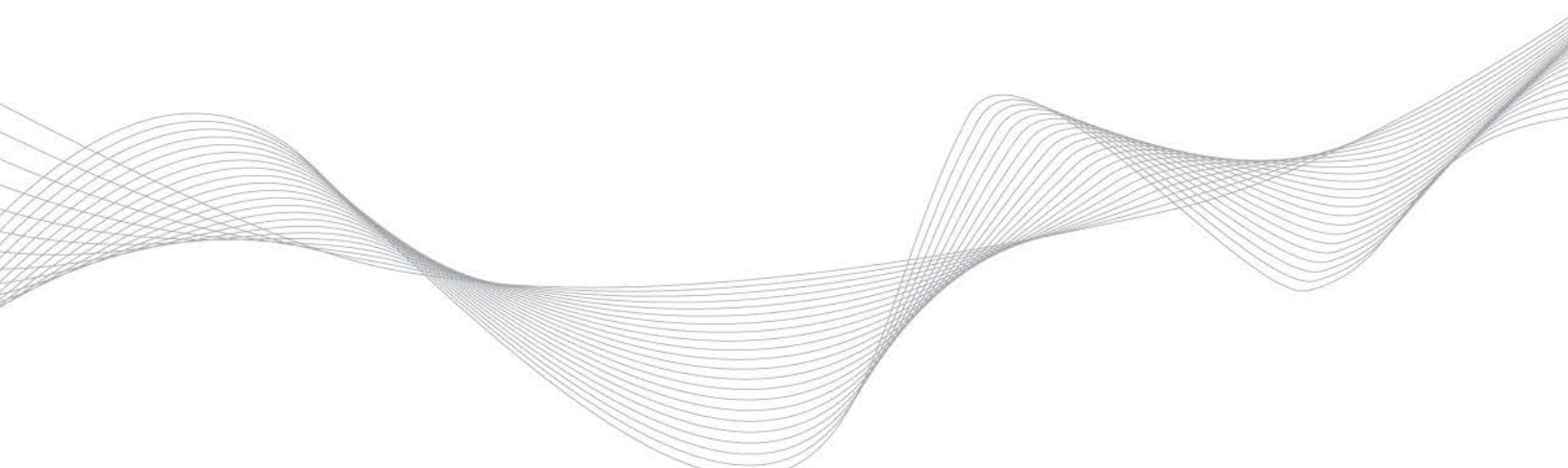### Notification and Startup Time Rules Proposal

MIC
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## I. Notification and Startup Time Rules

### II. *Scope*

This document contains the rules needed to complete the implementation of the approved proposal. These rules need to be included in PJM Manual 11: Energy & Ancillary Services Market Operations.

## III. Definitions

- Notification Time: Time needed by a resource from the PJM dispatch notification to the start sequence.
- Startup Time: Time needed by a resource from the start sequence to breaker close.
- TTS: Time to start. Applicable notification plus startup times (e.g. a steam turbine in cold temperature state with 2 hours cold notification time and 6 hours cold startup time has an 8 hour time to start). Time to start is also referred as lead time.
- TTS parameters: Consist of the four Notification Times and the three Startup Times (i.e. hot/intermediate/cold/extended cold Notification Times and hot/intermediate/cold Startup Times).
- Notification Time Bandwidth: Maximum amount of time Market Sellers are able to add to their generation resources default notification time parameters without the need to request for a TTS parameter change.

## IV. Obligations

- Market Sellers may submit Notification and Startup Times within the approved default values plus bandwidth without the need to request a parameter change or notifying PJM and the MMU during the Peak Period Months.
- Market Sellers may submit Notification and Startup times greater than the default values plus bandwidth. Market Sellers shall notify PJM and the MMU of changes in their Notification and Startup Times by requesting a parameter change.
- Market Sellers may submit extended cold Notification Times during the Off-peak Period Months as long as those times accurately reflect the physical time to bring the unit to the beginning of the unit startup sequence. The Startup Times shall not be impacted, only the Notification Times shall be extended.
- Market Sellers' ability to submit Notification and Startup Times shall not be limited by the eMKT System.
- Notification Times and Startup Times shall be the same for price-based energy offers and cost-based energy offers. This shall only apply for offers based on the same fuel type (e.g. a single fuel unit shall have the same price and cost-based Notification and Startup times, but a dual fuel unit may have the same Notification and Startup Time across its price-based offer and only one of its cost-based offers.)

## V. Parameters and Bandwidth Approval Process for Existing Units

- Market Sellers shall submit to PJM and the MMU their generation resources unit-specific default values for TTS parameters and Notification Time Bandwidth by XXX.

- Market Sellers shall provide for each generation resource historical operating data in support of the submitted TTS parameters and Notification Time Bandwidth. The Market Sellers may also provide technical information about operational limits that support the submitted TTS parameters and Notification Time Bandwidth.
- The MMU shall evaluate the submitted TTS parameters and Notification Time Bandwidth. The MMU shall notify the Market Seller of its determination no later than XXX. The Market Seller and the MMU may engage in conversation in order to come to consensus. If the MMU approves the submitted TTS parameters and Notification Time Bandwidth or if the Market Seller and the MMU come into agreement, the approved or agreed upon values shall be the default TTS parameters and Notification Time Bandwidth.
- If the Market Seller and the MMU cannot come into agreement, PJM shall evaluate the submitted TTS parameters and Notification Time Bandwidth. PJM shall notify the Market Seller and the MMU of its determination no later than XXX. The Market Seller and PJM and the MMU may engage in conversation in order to come to consensus. If PJM approves the submitted TTS parameters and Notification Time Bandwidth or if the Market Seller and PJM come into agreement, the approved or agreed upon values shall be the default TTS parameters and Notification Time Bandwidth. If the Market Seller and PJM cannot come into agreement, the Market Seller shall resort to PJM's Dispute Resolution Process (see PJM Manual 33: Administrative Services for the PJM Interconnection Agreement Section 5: Dispute Resolution).

## VI. Parameters and Bandwidth Approval Process for New Units

Same as for existing units but instead of no later than XXX, say no later than XXX days before the expected in service date (definition pending).

## VII. Parameter Change Approval Process

- There are two different types of TTS parameters and Notification Time Bandwidth changes to the default values:
  - Temporary Change – is a one-time change lasting for 30 days or less during the twelve month period from June 1 to May 31.
  - Persistent Change – is a change lasting for more than 31 days.

### VIII. Temporary Change

- Market Sellers shall notify PJM and the MMU when a temporary change commences and provide PJM and the MMU documentation explaining the details for the temporary changes within three days following the commencement of the change. The documentation shall include:
  - Unit name.
  - TTS parameter to be changed.
  - Reason and justification for the change.
  - Date and/or time on which the change will end.
- The Market Sellers may also provide technical information about operational limits that support the submitted TTS parameters and Notification Time Bandwidth.

- The MMU shall evaluate the submitted TTS parameters and Notification Time Bandwidth. The MMU shall notify the Market Seller of its determination no later than 15 days after the commencement of the change. The Market Seller and the MMU may engage in conversation in order to come to consensus.
- If the Market Seller and the MMU cannot come into agreement, PJM shall evaluate the submitted TTS parameters and Notification Time Bandwidth. PJM shall notify the Market Seller and the MMU of its determination no later than 30 days after the commencement of the change. The Market Seller and PJM and the MMU may engage in conversation in order to come to consensus. If the Market Seller and PJM cannot come into agreement, the Market Seller shall resort to PJM's Dispute Resolution Process (see PJM Manual 33: Administrative Services for the PJM Interconnection Agreement Section 5: Dispute Resolution).

*IX. Temporary to Persistent Change Transition*

- If prior to the scheduled termination date of the temporary change, the Market Seller determines that the temporary change must persist for more than 30 days, the Market Seller shall submit to PJM and the MMU a written request to modify the temporary change to become a period or persistent change, and provide detailed documentation explaining the reasons for the requested modification.

*X. Persistent Change*

- Market Sellers that may require increasing their default TTS parameters and Notification Time Bandwidth shall notify PJM and the MMU no later than February 28, for the proceeding twelve month period June 1 through May 31.
- Market Sellers shall provide for each generation resource the historical operating data in support of the submitted TTS parameters and Notification Time Bandwidth. The Market Sellers may also provide technical information about operational limits that support the submitted TTS parameters and notification time bandwidth.
- The MMU shall evaluate the submitted TTS parameters and Notification Time Bandwidth. The MMU shall notify the Market Seller of its determination no later than April 1. The Market Seller and the MMU may engage in conversation in order to come to consensus. If the MMU approves the submitted TTS parameters and Notification Time Bandwidth persistent change or if the Market Seller and the MMU come into agreement, the approved or agreed upon values shall be the default TTS parameters and Notification Time Bandwidth.
- If the Market Seller and the MMU cannot come into agreement, PJM shall evaluate the submitted TTS parameters and Notification Time Bandwidth. PJM shall notify the Market Seller and the MMU of its determination no later than April 15. The Market Seller and PJM and the MMU may engage in conversation in order to come to consensus. If PJM approves the submitted TTS parameters and Notification Time Bandwidth persistent change or if the Market Seller and PJM come into agreement, the approved or agreed upon values shall be the default TTS parameters and Notification Time Bandwidth. If the Market Seller and PJM cannot come into agreement, the Market Seller shall resort to PJM's Dispute Resolution

Process (see PJM Manual 33: Administrative Services for the PJM Interconnection Agreement Section 5: Dispute Resolution).

## XI. Safe Harbor (PENDING)

This is what the proposal had:

"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.

Notification+ startup time offer less than 12 hours (i.e. within the scheduling timeframe of PJM Day-Ahead Market).

No CT-type units will have "Safe Harbor" status

PJM and the MMU shall determine which steam units shall be categorized as safe harbor based on the process in which PJM schedules and commits these units. Safe harbor units will be exempt from the TTS parameters approval process.

## XII. Economic Indicator - TBD