Working Session Proposal to Full MIC
on
Unit Notification and Startup Times

Feb 15 , 2012

- MRC was presented with a problem statement at the 2011 January Meeting.

- OC determined the minimum operational reliability requirements in April 2011.

- MIC held special MIC sessions to address market issues associated with the reliability requirements.

- The initial proposal was brought to MIC on 11/1/2011. It was determined that more work need to be done.

- Since the 11/1 discussion, five more special MIC sessions (12/1, 12/19, 1/9, 1/18, 2/3) was conducted.

- At the 2/3/2012 meeting, PJM, MMU and market participants present at the meeting agreed on this proposal.

- The Peak Period is defined as Jan, Feb, Jun, July and Aug.

- During the peak period, generators will offer startup and notification parameters within a bandwidth of a mutually agreed performance parameter.

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

    - The bandwidth is the additional time to accommodate reasonable unit notification and startup variability during normal operation. If the offered parameter is outside the bandwidth, explanation will be necessary either through eMKT or directly to MMU.

- The notification plus startup time must not exceed 6 days during the peak period. The unit will be forced outage until it can be within the 6-day limit.

- Off-peak period months : Mar, Apr, May, Sep, Oct, Nov, Dec

- 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.

    - This is required by NERC standards already (NERC TOP-002-2b R3)

    - Start time should not be impacted, only notification time

- However, if PJM has a need to call the units with extended notification times, the units must respond to the call at the lesser of their submitted notification+startup time or 6 days.

    - Failure to do so will result in a forced outage.

    - If PJM subsequently does not need the unit to be online, there will be no forced outage.

- PJM retains the ability to call units on for reliability at any time, regardless of economics

- This ability exists today and will remain unchanged

- Capacity units must respond to these calls at the lesser of their submitted notification+startup time or 6 days
  - Failure to do so will result in a forced outage

- When PJM issues a unit Notification/Startup alert:
  - the alerted units must be in the state of readiness (i.e. able to be online within 48 hours) in the lesser of (submitted startup + notification time or 6 days) minus 48 hours.
    - After reaching the state of readiness, if PJM subsequently needs the unit to be online, the unit must be online within 48 hours. Failure to do so will result in a forced outage
  - PJM will evaluation the system conditions everyday to determine whether to release the units from the alert or to call the units online

- Recommend to add a new "Extended Cold" notification and startup category to the existing Cold, Intermediate and Hot categories. "Extended Cold" parameters will only be used when a unit returns from an extended shutdown for the first time.

- New Extended Cold parameters will be discussed and approved at CDS.

(Matrix ref. 3-A, 4-A, 4-H)

- MMU/PJM and Generation owners will agree on the notification and startup parameters and the unit-specific bandwidth prior to implementation of these changes

- Unit offer parameters will <u>never</u> be limited through eMKT

- Permanent change: provide the necessary information to MMU/PJM for permanent/long-term parameter change approval.

- Temporary change: If the entered parameter exceeds the agreed-upon parameter plus the bandwidth, eMKT will provide two new fields ("reason" and "expected duration") for the generation owner to explain the change.

  – PJM/MMU may follow-up with the generator owner on the nature or the duration of the temporary change.

- Proposed parameter change approval process:

  – Participant submits the change to PJM and PJM sends on to the MMU.

  – MMU approves/denies the change.

  – If MMU and the participant cannot come to agreement, PJM will make a determination after discussing the change with the participant and MMU.

  – If the participant and PJM cannot come to agreement, the participant has the option to go through the PJM dispute resolution process.

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

  - Determination will be based on forward fuel and emissions forward curves from Platts and the generator's cost curve

  - MMU will present their proposed methodology of computing this Economic Indicator at CDS and allow market participants to provide their feedback

- Generation owners supported this as long as it was for information purposes only

- If via this economic indicator MMU determines that the unit would have been economic yet an extended notification time was submitted, MMU will discuss the concern with the generator owner and may subsequently refer the behavior to FERC

  - _This ability exists today_. _Posting this parameter only provides the generation owner with an indication of the MMU's assessment on the economic viability of the unit._

- PJM agreed to publish the information in eMKT.

- "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

- Notification and startup times ought to be the same across cost and price schedules absent fuel differences

    - The idea is to provide additional flexibility to cost schedule so that the cost of shortening Notification/Startup time can be included in the cost-based startup cost.

    - It is not intended to add new restrictions to the existing price schedule construct.

    - Generation owner can request unit-specific exception through MMU

- Cost issues will be referred to the CDS for resolution

    - Generation owners will provide examples of such costs

- This proposal should be able to be implemented as soon as the technical changes required for implementation are in place but no sooner than Fall 2012.