

Monitoring Analytics, LLC 2621 Van Buren Avenue, Suite 160 Valley Forge Corporate Center Eagleville, PA 19403 Phone: 610-271-8050 Fax: 610-271-8057

## **PJM MMU** preferred options for unit notification and startup

- 1. Peak Period: Forced-outage if notification+startup more than 6 days. Forced outage if exceed physical parameters:
  - Unless physical reasons, reflected in historical operation
  - Can still be a capacity resource
  - For units more than 1 day lead time (cannot be scheduled in DA market): Forcedoutage if unit would be economic under its standard physical parameters (including minimum run time, minimum down-time, lead time, max starts), unless longer lead time for physical reasons.-
- 2. Non Peak Period: More than 6-1 day notification+startup (cannot be scheduled in DA market):
  - Unless physical reasons, reflected in historical operation
  - Can still be a capacity resource
  - Forced-outage if not able to come online within 6 days or able to be in the state of readiness within 4 days.unit would be economic under its standard physical parameters (including minimum run time, minimum down-time, lead time, max starts).
- 3. Aborted notification cost
  - As a capacity unit, there is a level of service requirement included in the RPM payment.
    Maintain current rule for aborted starts.
  - PJM is willing to pay for any notification costs associated with the historic operation of the unit.
  - Any notification costs incurred as a result of an economic decision by the generation owner to lay up the unit in extended shutdown mode will not be compensated.
- 4. Startup Time guidelines
  - Startup time should be physical.
  - Operationally, PJM will use the bid-inphysical startup time for scheduling.
  - Unit history will be used to determine start time. If units require exceptions to that start time parameter; the exception request must be documented and submitted to MMU.as a benchmark for follow-up review. A new eMarket field will be added to capture the reason if the startup time exceeds the benchmark plus a threshold.

- Generators may submit change requests to have their benchmarks determined off of something other than history.
- 5. Notification time guidelines
  - Notification time Generators may submit two notification times:
    - i. the physical notification time, based on unit history;
    - ii. the non-physical notification time.
  - Physical notification time should reflect fully-staffed unit that is not laid up for economic reasons.
  - <u>Non-physical notification time should reflect quickest time to return from laid up or destaffed status.is related to portfolio management.</u>
  - Operationally, PJM will use the bid-innon-physical notification time for scheduling, but use physical notification time for evaluating when to attribute forced outages.
  - Unit history will be used as a benchmark for follow-up review. A new eMarket field will be added to capture the reason if the notification time exceeds the benchmark plus a threshold.
  - Generators may submit change requests to have their benchmarks determined off of something other than history.
- 6. Application to price and cost schedules
  - Maintain consistency across price and cost schedules absent fuel differences.
  - Cost schedules should may have the flexibility of including the additional startup cost for the unit to have a faster response time on a separate schedule, if needed by PJM.-May require work through the CDS.
- 7. Effective time
  - Effective immediately if the proposal has no material change to the capacity market