

Change to CTs Committed in DA Market

- Currently, CTs committed in the Day Ahead Market do not run in real-time unless called on by PJM
- If these CTs are not called on by PJM in real-time and must buy out of their DA position at a loss, they are compensated for the loss
 - Tariff, Attachment K, Section 3.2.3(f-1)(ii)

(f-1) A Market Seller's combustion turbine unit or combined cycle unit operating in simple cycle mode that is pool-scheduled (or self-scheduled, if operating according to Section 1.10.3 (c) hereof), operated as requested by the Office of the Interconnection, shall be compensated for lost opportunity cost if either of the following conditions occur:

(ii) if the unit is scheduled to produce energy in the day-ahead market, but the unit is not called on by PJM and does not operate in real time, then the Market Seller shall be credited hourly in an amount equal to the higher of (i) $\{(URTLMP - UDALMP) \times DAG$, or (ii) $\{(URTLMP - UB) \times DAG$ where:

URTLMP equals the real time LMP at the unit's bus;

UDALMP equals the day-ahead LMP at the unit's bus;

DAG equals the day-ahead scheduled unit output for the hour;

UB equals the offer price for the unit, determined according to the schedule on which the unit was committed day-ahead, unless such schedule was a price-based schedule and the offer associated with that price schedule is less than the cost-based offer provided for the unit, in which case the offer for the unit will be determined from the cost-based schedule; and

where $URTLMP - UDALMP$ and $URTLMP - UB$ shall not be negative.

- During Summer 2011 PJM routinely scheduled low-cost CTs in the DA Market that were not called on in real-time
- Most times these CTs were not called on in real-time because they were often on the margin and they had extremely long lead and min run times for CTs
- Because these CTs were not called on by PJM, they were made whole when they had to buy out of their DA position at a loss causing a large increase in make whole payments of this variety

- Add clarifying language in M-11 stating that units with more than a 2 hour lead time are in effect “called on in real-time” when they receive a Day Ahead Market award
 - The 2 hour lead time was chosen because that’s how long PJM’s real-time unit commitment software forecasts.
- This will exclude all units with more than a 2 hour lead time regardless of unit type from these make whole provisions
- *PJM prefers this option.*

- Add clarifying language in M-11 stating that the Day Ahead Market Award at 1600 is in effect a notification to run the unit in real-time.
- This will still maintain this provision but allow PJM to call units committed in the Day Ahead Market based on their startup time only as the notification time will likely have elapsed since the Day Ahead Award.
- There is still some remaining concern with this option because there may be a CT that has a long startup time that causes the same problem that exists today.

- PJM prefers Option 1.
 - Units with more than a 2 hour lead time are not made whole.
- Both options would require M-11 language (MIC) and potentially M-12 (SOS/OC).