

Manual 11: Energy & Ancillary Services Market Operations Revision History

2.3.6.1 Market Power Mitigation

PJM tests for the concentration of local market power under transmission constrained conditions and applies measures to mitigate such power when detected. PJM's market power mitigation procedure continues under the energy market procedure. If transmission limits are identified during the day-ahead scheduling process or during real-time operations, the appropriate generators (those for which the owner fails the Three-Pivotal Supplier Test <u>("TPS Test")</u> as detailed in Section 6.4.1 paragraphs (e) and (f) of the PJM Operating Agreement) are offer-capped. <u>Units remain eligible to set LMP when offer-capped</u>. Both pool-scheduled and self-scheduled units are eligible for offer-capping.

Offer-capping will be applied as follows:

- Units are offer-capped at lesser of their cost-based or price-based schedules, including startup and no-load components. Specific details regarding determination of cost-based offers may be found in PJM Manual M-15 (Cost Development Guidelines) and Section 6.4.2 of the PJM Operating Agreement. <u>The lesser of the cost-based or price-based schedules is</u> <u>determined in accordance with Section 6.4.1(a) of the PJM Operating Agreement in the Day-Ahead Market, and in accordance with Section 6.4.1(g) of the PJM Operating Agreement in <u>the Real-Time Market.</u></u>
- For the units scheduled in the Day-Aahead Market, the offer caps will apply for the length of time the unit is scheduled in the Day-Ahead Market at the schedule that results in the lowest overall system production cost, in accordance with Section 6.4.1(a) of the Operating Agreement.
- For units scheduled in the Real-Time Market, the offer caps will apply at the schedule that results in the lowest dispatch cost for each hour of their commitment, in accordance with Section 6.4.1(g) of the Operating Agreement.
- Once a unit is offer-capped in the Real-time Market it shall remain offer capped until the earlier of:
 - o The unit's release from its commitment by PJM Dispatch
 - The end of the Operating Day
 - o The start of the unit's next pre-existing commitment
- Non-CT units, as well as CTs which are committed in the Day-ahead Market and expected to run in the Real-time Market without additional notification from PJM Dispatch, that are offercapped in the Day-aAhead Market will be offer-capped for those same hours in the Realtime market.
- Pool-scheduled CTs that are committed in the Day-Ahead Market and not expected to run in Real-time unless notified by PJM Dispatch and are offer-capped in the Day-Ahead Market will be re-evaluated for market power at the time of commitment in the Real-Time Market. Such units will be offer-capped in accordance with the results of the TPS test that is conducted at the time of the real-time commitment.

Comment [A1]: PJM's redline, moved here from the end of this section, for continuity.



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- Units offer-capped in the real-time market shall remain offer-capped until the unit's minimum run time is exhausted. Once the minimum run time for a particular unit expires in the real-time market, if that unit is no longer needed to control any of the constraints for which it was originally started but the unit is kept on-line, the decision as to whether the unit remains offercapped will be made as follows:
- If PJM needs the unit for economics (on its price-based offer) and the unit is not required to relieve a current or anticipated constraint, the unit will be un-capped.
- If released by PJM, any subsequent offer-capping decision for a unit will be determined by the Three-Pivotal Supplier Test.
- Units remain eligible to set LMP when offer-capped.
- Pool-scheduled units brought on-line for economics prior to constrained conditions will not be
 offer-capped at the time of commitment.
- Units which are not offer capped whose owners passed the TPS test at the time of
 commitment will remain uncapped and not be subjected to additional market power testing
 until the end of the initial capping determination period, which is defined as follows:
 - For pool-scheduled or self-scheduled units committed in the Day-Ahead Market, the end of their day-ahead commitment.
 - For pool-scheduled units committed in the Real-time market (and not in the Day-Ahead Market), the end of the greater of their day-aheadreal-time commitment or minimum run time.
 - For self-scheduled units committed in the Real-time Market (and not in the Day-Ahead Market), the end of the first hour of their commitment.
- Units running in real-time beyond the initial capping determination period, to maintain system
 reliability as a result of limits on transmission capability, will be subject to evaluation for
 market power on an hourly basis and will be offer-capped as follows:
 - Units operating on a price-based schedule whichwhose owner passes the TPS test will not be offer-capped and will remain on the price-based offer.
 - Units operating on a price-based schedule which do not pase whose owner fails the TPS test will be offer-capped.
 - Units operating on a cost-based schedule will remain on that schedule regardless of the results of the TPS test.
 - Once a unit is offer-capped in the Real-time Market it shall remain offer-capped until the earlier of:
 - The unit's release from its commitment by PJM Dispatch
 - The end of the Operating Day
 - The start of the unit's next pre-existing commitment

- Units brought on-line for economics prior to constrained conditions will not be offer-capped.



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 Once the price-based switch is set to price (set by PJM upon request from generation owner), the generator owner cannot return to a cost-based offer (cost-capped or historic LMPcapped).

Price-sensitive demand can set LMP in the Day-ahead Market.

- Participants can submit PRD Curves per business rules in Section 12 of this manual.