

Manual 11 Hourly Offer Updates

MIC

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Agenda

- **Market Power Mitigation**
- **Intraday Updates Opt in/Opt Out**



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Operating Agreement Section 6.4.1(b)

“(b)The energy offer price by any generation resource requested to be dispatched in accordance with Section 6.3 of this Schedule shall be capped at the levels specified below. If the Office of the Interconnection is able to do so, such offer prices **shall be capped only during each hour when the affected resource is so scheduled**, and otherwise shall be capped for the entire Operating Day.”

Operating Agreement Section 6.4.1(g)

“(g)Generations resources committed in the Real-time Energy Market of Market Sellers that fail the three pivotal supplier test will be dispatched on the cheaper of: (1) the cost-based offer representing the offer cap level as determined under section 6.4.2, and (2) the resource’s available market-based offer. The cheaper offer shall be defined as the offer which results in the lowest overall dispatch cost,…”

Application of market power mitigation

- **With hourly offers, the offer levels for cost based offers and market based offers can vary for each hour.**
- **Consequently, the determination of the cheaper offer can vary hourly.**
- **Market power mitigation should continue to effectively cap offers by using hourly offers.**

Application of market power mitigation

- **Resources should not be able to circumvent mitigation even after the owner fails the TPS test using hourly updates.**
- **MMU proposed M11 edits are consistent with the language in OA Section 6.4.1.**

IMM Proposed Redline

M11, 2.3.6.1 Market Power Mitigation

Offer-capping will be applied as follows:

- Units are offer-capped at lesser of their cost-based or price-based schedules, including start-up 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. The lesser of the cost-based or price-based schedules is 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 the Real-Time Market.**

IMM Proposed Redline

M11, 2.3.6.1 Market Power Mitigation

- For units scheduled in the Day-Ahead 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.**

IMM Proposed Redline

M11, 2.3.6.1 Market Power Mitigation

- Pool-scheduled units brought on-line for economics prior to constrained conditions will not be offer-capped at the time of commitment.

IMM Proposed Redline

M11, 2.3.6.1 Market Power Mitigation

- 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-ahead~~ ~~real-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.

Operating Agreement Section 6.4.1(h)

“(h) A generation resource that was committed in the Day-ahead Energy Market or Real-time Energy Market, is operating in real time, and may be dispatched out of economic merit order to maintain system reliability as a result of limits on transmission capability, will be offer price capped, subject to the outcome of a three pivotal supplier test, for each hour the resource operates beyond its committed hours or Minimum Run Time, whichever is greater, in accordance with the following provisions.

- (i) If the resource is operating on a cost-based offer, it will remain on that offer regardless of the results of the three pivotal supplier test.

Operating Agreement Section 6.4.1(h)

- (ii) If the resource is operating on a market-based offer and the Market Seller fails the three pivotal supplier test then the resource will be dispatched on the cheaper of its market-based offer or the cost-based offer representing the offer cap as determined by section 6.4.2, whichever results in the lowest overall dispatch cost as determined under section 6.4.1(g).
- (iii) If the Market Seller passes the three pivotal supplier test and the resource is currently operating on a market-based offer then the resource will remain on that offer, unless the Market Seller elects to not have its market-based offer considered for dispatch and to have only the cost-based offer that represents the offer cap level as determined under section 6.4.2 considered for dispatch in which case the resource will be dispatched on its cost-based offer for the remainder of the Operating Day.”

IMM Proposed Redline

M11, 2.3.6.1 Market Power Mitigation

- 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 ~~which~~ **whose 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 pass~~ **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.

Agenda

- **Market Power Mitigation**
- **Intraday Updates Opt in/Opt Out**



Intraday Offer Updates

- **Market Sellers may submit Real-Time Offers up to 65 minutes before the operating hour.**
- **Price-based offers:**
 - **Incremental Offer Curve:** May be decreased for committed units. May be increased/decreased for uncommitted units.
 - **No Load Offer / Start Offer:** May be increased/decreased if cost-based, fixed for six months if price-based.

Intraday Offer Updates

- **Cost-based offers:**
 - **Incremental Offer Curve / No Load Offer / Start Offer: May be increased and must be decreased per FCP and if price-based offer is updated.**

Operating Agreement Section 1.10.9A

“(b) Cost-based Real-time Offers shall be submitted to the Office of the Interconnection in the form specified by the Office of the Interconnection’s Offer Data specification, Operating Agreement, Schedule 1, sections 1.10.1A(d) and 1.10.9B, Operating Agreement, Schedule 2 and the PJM Manuals, as applicable. If a Market Seller submits a market-based Real-time Offer for a particular clock hour in accordance with subsection (c) below, or if updates to a cost-based offer are required by the Market Seller’s approved Fuel Cost Policy, the Market Seller shall update its previously submitted cost-based Real-time Offer.”

Operating Agreement Section 1.10.9A

“(c) If a Market Seller’s available cost-based offer is not compliant with Operating Agreement, Schedule 2 and the PJM Manuals at the time a Market Seller submits a market-based Real-time Offer for an applicable clock hour during the Operating Day, the Market Seller must submit an updated cost-based Real-time Offer consisting of an Incremental Energy Offer, Start-up Cost and No-load Cost for that clock hour that is compliant with Operating Agreement, Schedule 2 and the PJM Manuals.”

Intraday Offer Updates

- **PJM proposed M11 intraday offer update opt out language is not clear and it can be used to justify improper offer behavior.**
- **The proposed language assumes Market Sellers are by default opting in for intraday offer updates.**

Intraday Offer Updates

- **Without any changes to the current fuel cost policies, this will mean that all units will be able to update their price-based offers and will not be able to update their cost-based offers (since intraday offer updates are not currently covered).**
- **The MMU proposes that the default state should be opt out and Market Sellers must define in their fuel cost policies under which conditions the price-based and cost-based offers will be updated intraday.**

Intraday Offer Updates

- **Without this requirement, natural gas fired units will have to constantly check the intraday gas market for pricing data in order to remain compliant with section 1.10.9A (c) anytime the price-based offer is updated.**
- **Without this requirement, natural gas fired units will have the opportunity to change cost-based offers only when intraday gas prices increase.**

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