PJM’s Initial Proposal: Minimum Offer Price Rule

Adam Keech
VP – Market Design & Economics
MOPR CIFP Meeting
April 28, 2021
# CIFP Schedule

## Work Plan

<table>
<thead>
<tr>
<th>Pre-CIFP</th>
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| Discussions              | April 7 (2:30-4:30)  
                          | April 9 (9:00-12:00) |
| Poll                     | April 9-16  |
| Discussions (continued)  | April 20 (9:00-12:00) |

## Formal Process

<table>
<thead>
<tr>
<th>Stage 1: PJM PS/IC &amp; initial proposal</th>
<th>April 28 (9:00-4:00)</th>
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| Stage 2: PJM and stakeholder development of the matrix (options) | May 10 (9:00-4:00)  
                          | May 17 (9:00-4:00)  
                          | May 26 (1:00-5:00)  |
| Stage 3: PJM and stakeholders finalize proposals | June 7 (9:00-4:00)  
                          | June 16 (9:00-4:00)  |
| Stage 4: Final meeting  
  MC Meeting (MC vote) | June 30 (9:00-1:00)  
                          | June 30 (2:00-5:00)  |

| Board review |            |
| Feedback to members |            |
| Filing       | July 16    |
Manual 34 Requirements for Today

• PJM and the IMM will meet prior to Stage 1 meeting. The IMM will provide its feedback on the PJM package and discuss its alternative package, if applicable.
  – A topic-specific meeting occurred on April 21, 2021 although the general concept has been discussed at other times as well.
  – The IMM plans to speak today as well.

• “Initial CIFP meeting – Presentation of an Option Matrix, “pre-loaded” with PJM package including all issue (row) alternatives considered by PJM, noting the preferred option choices and the reasons therefor.”
• “Stakeholders will be presented with the details of PJM decision making and focus on improving option solutions and noting key areas of support and/or concerns.”
  – This is the purpose of the presentation today.
  – We will discuss this further as we go through the slides and matrix.
• This is an initial proposal.
  – We are seeking your input.
  – We are open to making changes to the proposal.
  – Options that are most important to us are identified under our interests.
  – There are details that need to be fleshed out.
    • We will identify where we know these exist along the way.
    • Please let us know if there are others.

• This is the first meeting in a process that we hope to be highly collaborative.
PJM’s Interests

- Maintaining reliability

- Mitigate buyer-side market power when appropriate.

- Accommodate state policy and self-supply business models.

- Remove PJM/IMM from role of determining which state policies are subject to the MOPR.

- Maintain consistency between clearing prices and supply-demand conditions.
• At its core, the capacity market is a tool to enable reliability. This is a critical function.

• Much of the discussion in Phase 2 will focus on enhancing the capacity market to ensure it continues to do so into the future.

• The focus of Phase 1 is on the MOPR given the time available.
Why is accommodating state policies and self-supply models important to PJM?

• Accommodating removes the risk to consumers of paying twice for capacity and the over-build (or over-retention) resulting from that.

• Accommodating removes the incentive for these entities to leave the capacity market entirely because of the economics of an individual resource.

• Shrinking the capacity market by large chunks reduces the overall benefit of the market to all participants.
Why does PJM believe it is not the appropriate entity to determine whether states are attempting to exercise buyer-side market power?

- States have the right to support resources.
- Interpreting state statutes is not our area of expertise.
- These issues are ones which uniquely involve the interaction of state and FERC authority and therefore are best resolved by the FERC.
Why is consistency between prices and supply/demand conditions important to PJM?

- To ensure that entry and exit decisions based on prices are well informed.
  - Higher capacity prices than needed indicate more supply is required when it is not. It can also delay retirement.
  - Not recognizing state policies that are occurring can lead to over-procurement and prices that may not reflect actual conditions.
- Repricing proposals and those that heavily rely on the MOPR create inconsistencies between prices and actual conditions.
- PJM believes this leads to unclear market signals.
PJM Proposal Scope

• Remove:
  – Existing MOPR focused on all new natural gas resources (and associated provisions)
    
    *Tariff Attachment DD, Section 5.14(h)*
  – Expanded MOPR resulting from December 2019 FERC Order (and associated provisions)
    
    *Tariff Attachment DD, Section 5.14(h-1)*

• Replace with:
  – MOPR proposal resulting from the CIFP
  – PJM will provide its initial proposal today
In this presentation, the term “state” will include:
- A state government, including D.C., acting in its sovereign capacity
- A political subdivision or instrumentality of a state acting in their sovereign capacity

“Self-supply” will include:
- Vertically integrated utilities
- Municipal utilities and Related Parties
- Cooperatives and Related Parties
PJM Proposal: Who determines if buyer-side market power exists?

**State policies:**
- **FERC**
  - State policy is presumed to be in “good faith” (not an exercise of buyer-side market power).
  - Presumption can be overcome via complaint to FERC.

**Self-supply:**
- **PJM**
  - Portfolio outside of long/short thresholds.
  - Triggers a unit-specific review of the most recent resource additions. (Consistent with 2012 MOPR)

**Bilateral contracts:**
- **FERC**
  - Bilateral contracts that instruct a supplier to offer below their cost in order to lower the market clearing price may be subject to referral to the FERC.
  - No MOPR application.
State Actions: “Good Faith” Presumption

• Initial presumption that state policies are done in good faith (not an exercise of buyer-side market power) and therefore not subject to MOPR.

• The presumption can be overcome via 206 complaint to the FERC.
  – FERC will decide. Not PJM or the IMM. All stakeholders as well as PJM and the IMM have the opportunity to weigh in at FERC

• *PJM will not apply the MOPR to a resource that is the subject of state support unless FERC grants the aforementioned complaint.*
State Actions: Clarification of “Targeting/Tethering”

• Articulate criteria in *Hughes v. Talen* in the Tariff.
  – **Targeting:** The state policy has the effect of replacing the wholesale rate for a FERC-jurisdictional product (capacity, energy, ancillary services), and;
  – **Tethering:** The payment or level of payment is contingent on clearing in the capacity market

• These were identified as criteria for pre-emption in that case but represent a workable standard as to when FERC could take action based on its sole authority over wholesale rates.
  – Serves as guidelines for states as to what policy characteristics will be viewed as exercises of buyer-side market power.
  – Complainants can use these criteria to argue their case.
State Policy = Renewable Portfolio Standard
Subsidy = REC Payment

• The REC is *not Targeted* at a FERC jurisdictional product.
• The REC is *not Tethered* to a commitment in the capacity market.

• RECs would not be subject to MOPR based on the definition in the Tariff.
• A stakeholder could still file a complaint and try to prove that based on underlying facts and circumstances the RECs are actually tethered or tied to the clearing price.
Hypothetical Application of State Action Provisions: State X acts to lower capacity prices to consumers

State Policy = State targets lowering capacity prices to consumers.
Subsidy = Lump sum payment contingent on a capacity commitment

- The subsidy is **Targeted** at a FERC jurisdictional product. It is capacity in PJM’s Tariff.
- The subsidy is **Tethered** to a commitment in the capacity market.
- This subsidy would trip the Tariff provisions and therefore likely be problematic should a complaint be filed, but FERC would decide.
• Self-supply entities will be subject to net long and net short thresholds.
• If the net portfolio is between these thresholds, that resource will not be subject to a unit-specific review or MOPR.
• PJM has not yet finalized what threshold levels we will propose. Below are the thresholds filed by PJM in 2018 for illustration.
• Pre-NRG MOPR had provision for updating tests based on actual supply conditions

<table>
<thead>
<tr>
<th>Type of Self-Supply LSE</th>
<th>Maximum Net Short Position (UCAP MW, measured at RTO, MAAC, SWMAAC and EMAAC unless otherwise specified)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Customer Entity</td>
<td>150 MW</td>
</tr>
<tr>
<td>Public Power Entity</td>
<td>1000 MW</td>
</tr>
<tr>
<td>Multi-state Public Power Entity*</td>
<td>1000 MW in SWMAAC, EMAAC, or MAAC LDAs and 1800 MW RTO</td>
</tr>
<tr>
<td>Vertically Integrated Utility</td>
<td>20% of LSE’s Estimated Capacity Obligation.</td>
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</tbody>
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*A Multi-state Public Power Entity shall not have more than 90% of its total load in any one state.

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<tr>
<th>Self-Supply LSE Total Estimated Capacity Obligation in the PJM Region (UCAP MW)</th>
<th>Maximum Net Long Position (UCAP MW)</th>
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<tbody>
<tr>
<td>Less than 500</td>
<td>75 MW</td>
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<tr>
<td>Greater than or equal to 500 and less than 5,000</td>
<td>15% of LSE’s Estimated Capacity Obligation</td>
</tr>
<tr>
<td>Greater than or equal to 5,000 and less than 15,000</td>
<td>750 MW</td>
</tr>
<tr>
<td>Greater than or equal to 15,000 and less than 25,000</td>
<td>1,000 MW</td>
</tr>
<tr>
<td>Greater than or equal to 25,000</td>
<td>4% of LSE’s Estimated Capacity Obligation capped at 1300 MWs</td>
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Challenges With the Self-Supply MOPR

• While using these tests may help identify scenarios where a self-supply entity could exert buyer-side market power, their implementation becomes more complicated when additional supply types are subject to the MOPR.

• Previous versions of the long/short test applied to only to new natural gas units.

• Further discussion is needed on implementation details including applicability and threshold levels.
Bilateral Contracts Between Market Participants

- Per FERC’s request for” Post-Technical conference comments:

“For example, a buyer could contract with a seller outside of the PJM capacity market and direct the seller to submit an offer below the supplier’s cost (e.g., at zero) in the PJM capacity auction to lower the market clearing price. Such a strategy would lower the buyer’s total capacity procurement costs if the savings the buyer achieves from the lower market clearing price paid for the total quantity of capacity the buyer purchased in the PJM capacity market exceeds the losses (excess costs in this example) the buyer incurred from the out-of-market contract with the seller.”

- PJM proposes provisions to cover this scenario but believe these cases should be referred to the FERC as they are fact-specific and require investigation.
Matrix Options and PJM’s Current Thinking
Row #1: Potential indicators of buyer-side market power

Proposal: There are several indicators:
1. State policy that is targeted and tethered
2. Self-supply business models with rate-base recovery
3. Bilateral contracts that direct the seller to offer below their cost for the purpose of lowering the clearing price (subject to FERC referral, not subject to MOPR)

PJM Thinking: Numbering is consistent with above:
1. Policies that are targeted and tethered violate standards identified in the Hughes case and therefore represent reasonable triggering standards for consideration by FERC.
2. There are scenarios where self-supply may be incentivized to exert buyer-side market power. Also consistent with 2012 MOPR. Exemptions apply.
3. Similar to targeting and tethering as described for state actions. These cases are fact-specific and therefore warrant review by the FERC.
Row #2: Reach of the new MOPR

**Proposal:** New and existing units. DR, EE and PRD are exempt.

**PJM Thinking:** DR, EE, and PRD are demand side products that are intended to result in reducing capacity purchases and costs.
Proposal: Presumption of “good faith” (not an exercise of buyer-side market power). State policies only subject to MOPR upon overturning the presumption via a 206 complaint.

PJM Thinking: PJM recognizes the states’ authority to support resources and the market consequences of not recognizing those supported resources. Targeting and tethering are reasonable and legally-grounded guideposts for states and stakeholders that give states the ability pursue their policy objectives including decarbonization, economic development, etc., and others so long as the policy is not targeted or tethered to a FERC-jurisdictional product.
Proposal: Apply net long/short tests for self-supply similar to those provided. Actual test values are to be determined.

PJM Thinking: Self-supply that is net short can build or contract supply that offers at $0/MW-day and lower the price for the remainder of their load which purchases from the market. This can be viewed as an exercise of buyer-side market power.

Self-supply that is net long can overbuild with the incentive to lower prices for other entities and split the savings. Probably a less likely scenario. However, can also be viewed as an exercise of buyer-side market power.
Proposal: To be determined.

PJM Thinking: These need to be reanalyzed based on up-to-date data. PJM will propose these levels at a forthcoming meeting.
PJM Proposal: None.

Thinking: The MOPR proposal is constructed with the goal of only subjecting resources to MOPR if necessary. Given how narrow the MOPR is, PJM does not foresee the need for further exemptions.
Row #7: Arbiter of which state policies are subject to MOPR

**Proposal:** FERC

**PJM Thinking:** Covered previously.

- States have the right to support resources.
- Interpreting state statutes is not our area of expertise.
- These issues are ones which uniquely involve the interaction of state and FERC authority and therefore best resolved by the FERC.
Proposal: Status Quo.

PJM Thinking: PJM believes the current options are adequate. Ultimately there may be an ability to remove all or some default calculations but that will also depend on the resolution of the Market Seller Offer Cap.
Proposal: Existing resources subject to MOPR are assessed at Net ACR while new resources are assessed at Net CONE. Remove possibility for existing units to be set back to new.

PJM Thinking: Generally uses the existing methodology with the added simplification of not having resources revert back to new. PJM believes that this method is straightforward and consistent with investment decisions.
Proposal: Resources remain subject to the MOPR for as long as they trigger the MOPR conditions. Status from new to existing changes based on clearing at Net CONE.

PJM Thinking: Difficult to find strong rationale for a different option.
Row #11: Modifications to the Clearing Process

Proposal: None.

PJM Thinking: Not applicable.
Row #12: Sunset Provisions

Proposal: None.

PJM Thinking: To the extent a durable solution comes out of this CIFP process, a blanket sunset provision (as opposed to reviewing elements such as net short/net long levels) only adds uncertainty that complicates both state and market participant decision-making.
Facilitator:
Dave Anders,
David.Anders@pjm.com

Secretary:
Alex Scheirer,
Alexandra.Scheirer@pjm.com

SME/Presenter:
Adam Keech
Adam.Keech@pjm.com
Lisa Morelli
Lisa.Morelli@pjm.com

CIFP- MOPR

Member Hotline
(610) 666 – 8980
(866) 400 – 8980
custsvc@pjm.com