



S&P 500	2,171	+25	+1.09%
GlobalDow	1,104	+13	+1.14%
Gold	1,965	+30	+1.53%
Oil	1,165	+18	+1.56%
	77.56	0.09	0.12%



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Modifications to RPM to Accommodate State Public Policy Initiatives

September 11-12, 2017 PJM CAPPSTF



Benefits of AMP's Modifications to RPM

- Simpler construct
- Less administrative and more market-focused
- Accommodates state policy decisions while recognizing and preserving jurisdictional limitations.
 - States can only obligate the entities over which they have jurisdiction (varies by state)
- Allows for consumers to be potentially shielded from price volatility
- Maintains single-stage clearing price mechanism within the BRA

Long-term, Bilateral Contracts in RPM

- Current construct does not incent long-term bilateral transactions
 - Buyer and seller expectations are not aligned
- We believe this is because suppliers have an alternative to a long-term bilateral via an administratively determined result that could be higher for the short-term and has the hope of continued modification to ensure price is maintained
 - e.g.: repricing proposals
- Does not expand MOPR to existing resources which we believe is counter to economic theory that existing resources should have ability to offer as a price taker if so desired.
- Eliminates need for MOPR as arms length bilaterals are not seeking to exercise monopsony power.

Changes to Proposal since the July 18 Meeting

- Calendar (timing) for the BRA
- Removal of LSE penalty

Updates to Proposal since the August 2-3 Meetings

- Recommend proactive development of a secondary exchange (e.g., Nodal Exchange, PJM Bulletin Board)
- Single Incremental Auction, timing TBD
- **Additional details/clarifications**

Stakeholder Questions Raised at the August 23 Meeting

1. How does the AMP proposal address subsidized resources?
2. How would load be assigned to the subsidized resources if the resource is not able to participate in the BRA?
3. Is the AMP proposal “in-bounds”?
4. To what level of reliability target (IRM, IRM+) is targeted?
5. What are the mechanisms for the facilitation of bilateral transactions including opportunities for price discovery?

Outstanding Decisions as of August 23

- When should the BRA be held (12 months or 18 months ahead of the start of the DY)?
- When should the IA be held (#days or months before start of the DY)
- Auction design: sealed bid, declining clock, other?
- Auction construct: VRR, vertical demand, other?

Proposal

- **RPM Components Unchanged from Current Construct**

- Unit performance (CP) and penalties remains the same for resources that receive a capacity obligation from the PJM auction
- Unit specific procurement
- No economic withholding
- RTO reliability requirement (IRM process)
- Locational
- Demand Response Participation
- Determination of CONE and Net CONE for reference unit
- Auction design: sealed bid
- Auction construct: VRR curve

Proposal

- **Modified Design Components**
- Capacity Procurement Term: Equal to or greater than 1 year
 - Procurement via **BRA**, self-supply, or bilateral contract
- Replacement of the Base Residual Auction conducted three years prior to the delivery year with a regional and constrained (if and as determined by PJM) Backstop Residual Auction (BRA) held **closer to the delivery year (1 year forward)**
 - **Offers the benefit that the load forecast is more accurate the closer it is to the point in time for which it is being used (i.e., 1 year ahead should be more accurate than 3 years ahead)**
 - Would negate need for multiple incremental auctions
 - Existing design has been subject to discussion for possible revisions multiple times, including within the current IASTF

Proposal

- Interaction between bilateral market and PJM and the IMM
 - Any capacity with a bilateral or self-supply arrangement must notify PJM and the IMM with the quantity (up to UCAP)
 - Any available capacity (up to UCAP) must be offered in to the BRA
 - Any load with a bilateral or self-supply arrangement must notify PJM and the IMM with the quantity
 - Any outstanding obligation below the load's requirement (Peak Load Obligation) including the Installed Reserve Margin will be procured on the load's behalf within the BRA
 - Any bilateral transaction will include the terms of the arrangement for submittal, **but not approval**, by PJM and the IMM
 - Price: for price discovery, reports after the BRA produced by the IMM and/or PJM; parties to the bilateral would be masked
 - Terms: the length of the bilateral, should the deal be for >1 delivery year.
 - PJM will be able to know how much capacity to expect in multiple future years
- Transition:
 - Implement new process for 2021/22 Delivery Year
 - BRA's already conducted for DY 2018/19, 2019/20, and 2020/21

Proposal

- **Example Calendar (for 1 year ahead BRA):**
- Status quo timing for release of planning parameters and conducting the BRA but the auction is held 1 year forward not 3 years.
- PJM determination of **planning parameters 16** months before the delivery year (**February 1** of the year before the start of the DY on June 1)
 - Next year of need is DY 2021/22 (June 1 – May 31)
 - February 2020: Planning Parameters for May 2020 BRA
 - May 2020: Backstop Residual Auction for DY 2021/22
 - **March 2021: Incremental Auction held for DY 2021/22**
 - Same timing as for when the Third Incremental Auction is held today, three months forward

Proposal

- These modifications will enable RPM to meet its primary reliability responsibility by ensuring adequate resources to meet the 1 in 10 year reliability target, as well as address locational capacity delivery issues
- The Backstop Residual Auction (BRA) will provide the necessary last resort for uncommitted supply and load with remaining obligations
- The Incremental Auction allows PJM to purchase or sell capacity depending on changes to load forecast within some tolerance (like today), change in capacity obligation (e.g., change in capability from uprates), and/or unit failure (e.g., catastrophic failure)
- Transparency and price discovery will be maintained via the BRA, the IMM compilation of masked bilateral costs and durations, the Incremental Auction, deals transacted on secondary exchange, as well as PJM's triannual determination of relevant reference unit price(s)
- Market power concerns will be addressed via a continuation of the must offer requirement for supply and for areas that fail the TPS Test market mitigation for resources participating in the BRA.
- States will be able to pursue any public policy initiative with resources that meet PJM established performance requirements

New Proposal Details (Added since August 29 meeting)

- For the purpose of AMP's proposal, a subsidized resource:
 - Cannot participate in the BRA
 - Cannot transact bilaterally (avoid double-dipping)
 - Capacity satisfies the equivalent (accounting for reserves) load obligation to the load that pays for the subsidy (load receives capacity credit)

Answers to Stakeholder Questions (Aug. 23 Meeting)

1. How does the AMP proposal address subsidized resources?

- Resources that trigger the subsidy screen are prohibited from participating in the BRA
- Resources that trigger the subsidy screen would not have any available capacity (up to the amount of the subsidized quantity) to sell bilaterally.

Answers to Stakeholder Questions (Aug. 23 Meeting)

2. How would load be assigned to the subsidized resources if the resource is not able to participate in the BRA or transact bilaterally?

- States can only obligate the entities over which they have jurisdiction. Thus, if a state wants a particular resource or attribute then:
 - the state may obligate the regulated electric distribution utilities (EDUs) to procure it through a competitive process resulting in a bilateral contract. The costs for this must be recovered as a non-bypassable charge to all retail customers of the EDU regardless of whether retail customers are shopping for generation or not (like a distribution charge).
- The costs of the subsidy to meet the state obligations should be recovered from retail customers specified by the state and the preferred design approach is to keep those arrangements out of the BRA and bilaterals.
- To assign load to a subsidized resource that is not part of the BRA is to use the state certified service territories

Answers to Stakeholder Questions (Aug. 23 Meeting)

3. Is the AMP proposal “in-bounds”?

- Yes. From the charter, objective #4: “...accommodate/address both capacity construct objectives and state actions.”
 - The AMP proposal satisfies both parts of the objective
- From the problem statement: “...to ensure potential state public policy initiatives and RPM objectives are not at odds.”
 - The AMP proposal addresses the problem at hand.
- From the problem statement: “modify RPM”. AMP’s proposals are modifications to the existing construct; there are many features we are retaining with which we disagree

Answers to Stakeholder Questions (Aug. 23 Meeting)

4. To what level of reliability target (IRM, IRM+) is achieved?

- If an LSE entirely meets its obligation bilaterally or via self-supply, the target is the Installed Reserve Margin
- If an LSE relies on the BRA to meet any of its obligation, the target is the reserve margin resulting from the BRA (*i.e.*, where the supply curve crosses the VRR curve)

Answers to Stakeholder Questions (Aug. 23 Meeting)

5. Transaction mechanism and price discover opportunities:

- One option: Proactive development of a secondary exchange
- Purpose: to facilitate transactions between load and supply
- Benefits:
 - Allows suppliers and load/LSEs to have a single location to work through for transaction facilitation
 - Would not interfere with transactions that occur directly between the buyer and the seller
 - Would minimize the amount of collateral (credit) that would need to be posted if deals are transacted with numerous counterparties
 - Offers additional price discovery opportunities
- Reports from PJM and the IMM:
 - Masked bilaterals
 - CONE and Net CONE
- Note: may not be necessary as market services will evolve forward capacity curves and suppliers report transactions (similar to energy transparency)

Proposal

- Still evolving
- Need feedback
- Suggested improvements

Proposal Q&A

Note: these are the 11 questions posed by PJM to the proposal sponsors.

<http://www.pjm.com/-/media/committees-groups/task-forces/ccpstf/20170911/20170911-trigger-questions.ashx>

Q&A

- How do you define the problem that you are trying to solve with your proposal?
 - *The AMP proposal seeks to fully address the problem as described within the Problem/Opportunity Statement specifically by offering a solution to ensure potential state public policy initiatives and RPM objectives are not at odds. AMP's solution with the modifications we propose will allow the RPM to be resilient as states may take future actions to meet their preferred environmental, political, or policy objectives.*
 - *In totality, the AMP proposal offers modifications to RPM that accommodate capacity construct objectives and state actions.*
- Does your proposal accommodate resources with state government preferences on a non-discriminatory basis? How?
 - *The AMP proposal, on a non-discriminatory basis, fully accommodates resources with state policy preferences. Quite simply, if a resource accepts a state issued subsidy it will forgo an explicit capacity payment. The asset owner will have to decide whether they wish to accept an offer of a known state subsidy or not as that decision impacts their decision as to whether to seek an unknown future capacity payment.*
- Will your proposal encourage or frustrate state policy objectives or other subsidies?
 - *The AMP proposal will neither encourage nor discourage state policy objectives or other subsidies. The impact of the AMP proposal on the quantity of subsidies within RPM will be fully in the hands of the asset owners as they will be the entity responsible for deciding whether to seek and/or accept a subsidy offer or not. In any event, RPM and the capacity resources participating in the "market" and the load that is being served will be shielded from subsidized payments made to select resources.*

Q&A

- What is your definition of an actionable subsidy (you may include specific factors such as MW or economic thresholds, timing of payment, rate and reasons for the subsidy, etc.)?
 - *State legislative actions that favor a particular resource type. This would exclude state actions that minimally promote renewables.*
 - *Does not include a utilities business model (i.e. public power, cooperative and vertically integrated utility business models).*
- What impact does your proposal have on energy markets?
 - *The AMP proposal would not impact energy markets in any way different than today in that a resource that clears RPM with a capacity obligation has a daily energy market must-offer requirement. Any resource that does not participate in RPM because of the acceptance of a subsidy payment would also have a daily energy market must-offer requirement.*
- Will your proposal result in or mitigate long term price suppression in the capacity market and/or the energy market?
 - *To the extent that today's capacity market and/or energy markets have had price suppression and the cause of that price suppression is a result of the existence of certain resources being paid via a state-sanctioned subsidy, the AMP proposal would mitigate the impact of those subsidies on the capacity market because both the resource and the load served by the capacity would be removed from the supply and demand curves in the auctions.*

Q&A

- How do you think your proposal will impact bidding behavior?
 - *Unlike most, if not all, of the repricing proposals that may incent a bidding behavior labeled as “a race to the bottom” the AMP proposal will not impact bidding behavior as exhibited in today’s (mitigated) construct.*
- Please address the effects of your proposal on potential market manipulation.
 - *Existing market power mitigation protections that exist today will continue to exist under the AMP proposal.*
 - *Additionally, the use of arms-length bilaterals and a shorter timeframe between the auction and delivery year will eliminate the need for MOPR.*
- Please address the potential for “leakage” (the effects of one jurisdiction’s actions on other jurisdictions).
 - *The AMP proposal will accommodate state policy decisions while recognizing and preserving jurisdictional limitations. In the end, states can only obligate the entities over which they have jurisdiction and so there is an inherent geographical limit on where and to whom subsidies payments are collected. No leakage on capacity payments.*

Q&A

- What is the preferred implementation timing?
 - *AMP proposes implementing the modifications for the subsequent BRA after the proposal discussions come to their natural conclusion. We should not rush to finish discussions to implement the changes before the next PJM BRA. However, because of the modifications to the timing for when the BRA is to be conducted in the AMP proposal relative (1 year forward) to the status quo (3 year forward) the timing would be for the 2021/2022 delivery year (BRA held in May 2020).*
- For repricing proposals, please explain your treatment for “in between” resources and why you believe it is the right approach (“in between” resources are those that did not clear in one stage of a repricing proposal but offered at a level less than the final clearing price determined in a second stage).
 - *N/A to the AMP proposal but this highlights a major concern and design failure of the repricing proposals. Resources with or without a subsidy that bid low in stage one in the hope and expectation of clearing and then receiving a higher capacity payment that results from stage two is poor market design and could incentive additional subsidies as well as reward resource owners for receiving a subsidy.*