PJM CIFP-RA Perspectives

August 1, 2023

Drivers and Goals

- **CIFP-RA was initiated in response to two drivers:**
  - ✓ Winter Storm Elliott
  - ✓ PJM Report on Resource Retirements, Replacements & Risks (4R Report)
- **PJM Board tasked stakeholders with four goals:**
  - ✓ Enhanced risk modeling
  - ✓ Evaluation of potential modifications to the Capacity Performance construct and alignment of permitted offers to the risk taken by suppliers
  - ✓ Improved accreditation
  - ✓ Synchronization between the RPM and Fixed Resource Requirement (FRR) rules
- **Given the limited time between a FERC filing and the beginning of pre-auction activities for a June BRA, it is essential that any proposal be clearly acceptable to FERC and easily implementable for both PJM and market participants. Vistra is concerned that the seasonal construct cannot meet this criteria.**

PJM and stakeholders should work expeditiously to meet the Board's stated objectives. This will NOT be the last word on capacity market and resource adequacy reforms – let's not try and do too much at the expense of doing it right.

What We Like

- **Continued support for a strong Capacity Performance Penalty/Bonus framework.**
  - ✓ Existing formula for the penalty rate and stop loss represents an important tool for ensuring reliability and providing ratepayers' value for their capacity market investment
  - ✓ Recognizes that the value of capacity varies depending on weather conditions and other factors impacting system stress
  - ✓ Changing the penalty rate and stop loss in response to Winter Storm Elliott sends a chilling investment signal regarding the value of reliability
  - ✓ Refile the definition of Emergency Action to explicitly include Extended Primary Reserves

- **Continuation of the "must-offer" exemption for intermittent and storage resources.**

  Removing the exemption would:
  - ✓ Unnecessarily burden intermittent and storage resources while not materially changing PJM's operational flexibility
  - ✓ Place a high degree of reliance on getting accreditation "right"

What We Like

- **Alignment of FRR and RPM rules that enhances reliability and ensures fair treatment of all resources.**

Vistra supports the reforms proposed by PJM, including:

✓ All resources (RPM and FRR) should be subject to the same penalty structure for PAIs

✓ FRR resource deficiency charges should be consistent with the insufficiency charge rate

✓ Testing requirements should be the same for all resources

Additionally, Vistra supports the reforms proposed by Calpine, including:

✓ Limiting opportunities for FRR load zones to free-ride on incremental reliability achieved through the RPM market

✓ Consistent treatment for both RPM and FRR resources with respect to retroactive replacement transactions for capacity

What We Like

- **Introduction of Tradable Performance Credits**

Vistra supports the reforms proposed by PJM to develop a PAI obligation exchange, including:

✓ The ability of market participants to manage a financial PAI obligation

✓ Increase in granularity using an Hourly PAI Committed UCAP

Additionally, Vistra encourages PJM to:

✓ Improve transparency regarding posting of system risk information that will serve as the foundation for an exchange and benefit stakeholders generally

✓ With stakeholders, continue with the development of a Tradable Performance Credit platform either in a future CIFP or RASTF or via a standalone PS/IC

What We Are Concerned About

- **Limiting bonus eligibility only to the committed ICAP value of capacity resources.**
  - ✓ This proposed change undermines reliability, since capacity resources who perform during a PAI event are clearly needed to maintain system reliability.
  - ✓ Asset owners invest in their resources prior to knowing whether they will have a capacity commitment (indeed that investment may be the reason the resource failed to clear); participation in the bonus pool offers an opportunity to recoup that investment.
  - ✓ Allowing eligibility beyond committed ICAP, but no higher than the level of CIRs, takes the pressure off of getting accreditation "right" and recognizes that the accreditation process is not perfect and all emergency events will not be the same

- **Testing requirements that may be both discriminatory and not aligned with actual market and operating conditions.**
  - ✓ Test scheduling should incorporate market and operating conditions, including the gas nomination cycle
  - ✓ Generator Operational Testing is focused on resources that run infrequently and, thus, buy gas infrequently; but would buy gas if scheduled in the DAM or in response to anticipated system conditions

What Needs More Time

- **Seasonal Construct**
  - ✓ Significant work is still required regarding details on accreditation, seasonal demand curves, and auction clearing mechanism.
  - ✓ It is critical for market participants who will be offering their resources as well as PJM and FERC to understand and have confidence in the market mechanisms, including the offer structure and clearing mechanism.
  - ✓ At a minimum, PJM should consider a delayed implementation in which the skeleton of seasonal construct is submitted to FERC but stakeholders continue to work on details such as the seasonal demand curves and resource accreditation; similar to the process that is used for the quadrennial review.
  - ✓ It remains unclear how the seasonal construct addresses either the Board's CIFP directive or the concerns raised by the 4R Report or Winter Storm Elliott.
- **Fuel Assurance**
  - ✓ At this time, PJM should focus on collecting data and increasing visibility into resource fuel flexibility.
  - ✓ Work should be coordinated with the EGCSTF.

Each of these concepts are important and complex items that deserve significant consideration from stakeholders – consideration that is not possible at this time. Additionally, these concepts may benefit from data collected from future auctions or from the activities of other stakeholder groups.

What Needs More Work

Market Seller Offer Cap (MSOC) – Reforms Needed

- Many lessons to be learned from Winter Storm Elliot, but one thing is clear, **the risk associated with a capacity commitment is not $0.**
  - ✓ Both PJM and the IMM have acknowledged that Winter Storm Elliot has changed the risk evaluation for Capacity Resources.
- 4R Report highlighted that capacity resources may face several significant risks, including:
  - ✓ Environmental risk
  - ✓ Economic risk
  - ✓ Increasing natural gas headwinds
- Significant capacity market reforms – including revised accreditation and the introduction of a seasonal market – while potentially beneficial for the market as a whole, will introduce **new and different risks** for individual capacity resources.
- FERC has recognized that capacity market resources must have the opportunity to reflect **their evaluation** – not PJM's or the IMM's – of **their individual risk**.
- Without the ability to reflect the asset owner's risk, capacity resources will likely continue to retire at an accelerated rate while the rate and quality of replacements are unknown

The single biggest action PJM can take to mitigate the predictions of the 4R Report is significant MSOC reform that allows resources to reflect the asset owner's evaluation of its individual risk.

What Needs More Work

Market Seller Offer Cap (MSOC) – Reform Principles

- Should not encourage buyer side market power while disproportionately discouraging market sellers' assessment of risk and lost opportunity cost of having a capacity commitment
  - ✓ Should not perpetuate past auction results which may be overly influenced by buyer side market power and under-accounting of risks
- In addition, explicit cost categories defined in the ACR calculation:
  - ✓ Should account for market risk associated with forward prices (LMP and fuel supply)
  - ✓ Should account for operational risk (e.g., EFORd risk, Penalty Risks, other supply risks associated with plant components)
- Should not incentivize price-taking offer behavior:
  - ✓ When technology-specific, should be based on best-in-class resource to achieve highest technically feasible accreditation
  - ✓ Should allow for tiered assessment of CP risks consistent with the typical outage profile of resources

What Needs More Work

VISTRA ENERGY

Market Seller Offer Cap (MSOC) – Reform Concepts

Default CPQR

- Vistra supports PJM's proposal to establish a default CPQR above zero and allow individual resources to request a higher unit-specific CPQR; however, some details are concerning:
  - ✓ Cost of capital may not be appropriate metric to apply to performance risk
  - ✓ Any unit-specific process needs to allow the asset owner the ability to apply their own metric (e.g., use of unit commitment models) for developing their cost of risk
  - ✓ Resources should be able to submit either or both a unit-specific ACR and CPQR; these evaluations are not tied to each other

Reliability-Focused Default Offer Cap

- PJM should develop a targeted default offer cap to address the specific concern regarding declining reserve margins articulated in the 4R Report
  - ✓ PJM sets a reserve margin threshold based on expected capacity resources; as long as that reserve margin is met, the current framework along with PJM's proposed enhancements including the default CPQR serve as the market mitigation mechanism
  - ✓ If the anticipated reserve margin drops below PJM's reserve margin threshold, a sliding-scale default offer cap is applied for the subsequent BRA(s) until the anticipated reserve margin returns to the threshold level

Both MSOC reforms are necessary and:

- Can easily be incorporated into PJM's existing market mitigation rules and proposed reforms
- Do not preclude additional market mitigation/MSOC reforms during a second stage of the CIFP or RASTF

Questions?

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