

Price Formation Transition

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Current PJM Proposal: Use Simulation Data to Adjust the E&AS Offset

- The goal of the E&AS adjustment is to reflect the additional E&AS revenues anticipated to be created by this proposal in the capacity market.
- PJM proposes to simulate the Energy and Reserve
 Market outcomes based on actual operating conditions,
 but with the proposed reserve market modifications, for
 Base Residual Auctions held after FERC approval is
 received.
- The revenues from these simulations will be used to scale the revenues normally used to determine the E&AS offset.

Auction Execution Date	Delivery Year	Revenue Year	Revenue Calculation
May 2020	2023/2024	2017	Scaled
		2018	Scaled
		2019	Scaled
May 2021	2024/2025	2018	Scaled
		2019	Scaled
		2020	Half Scaled + Half Actual
May 2022	2025/2026	2019	Scaled
		2020	Half Scaled + Half Actual
		2021	Actual
May 2023	2026/2027	2020	Half Scaled + Half Actual
		2021	Actual
		2022	Actual
May 2024	2027/2028	2021	Actual
		2022	Actual
		2023	Actual

^{*} For illustration purposes, this chart assumes May 2020 is the first Base Residual Auction held after FERC approval is received and the changes are implemented in June 2020



Compromise Discussion

 PJM appreciates the willingness of the stakeholders to discuss these complex topics.

 PJM is open to utilizing an alternative transition mechanism should stakeholders come to agreement on it.

- PJM is open to compromising other components of its proposal if it results in stakeholder consensus and a 205 filing.
 - Use of \$2,000/MWh PF



Compromise Discussion

- PJM has been working with stakeholders to arrive at a mutually agreeable position on the transition
- Several options have been discussed:
 - PJM adjusted E&AS offset proposal with \$850/MWh penalty factors in interim years and \$2000/MWh in end state
 - PJM adjusted E&AS offset proposal with \$850/MWh penalty factors in interim years and \$1000/MWh in end state with \$2000/MWh used in certain conditions
 - No E&AS offset adjustment with \$1000/MWh penalty factor and \$2000/MWh used in certain conditions



Compromise Discussion

- PJM's ideal path is to implement the following as Phase 1:
 - Tier 1/Tier 2 consolidation and offer changes
 - Enhanced locational reserve zone modeling
 - Downward-sloping demand curves with \$850/MWh PFs
 - RT 30-minute reserve market
 - DA and RT reserve market alignment

 Phase 2 would be an increase in the PFs to the final state. Any further transition steps (i.e. – E&AS offset simulations) would be dependent on that final state.



Timing of Implementation

 Phase 1 would be implemented as soon as practicable following FERC approval, potentially on the first day of the Delivery Year. The E&AS offset would be adjusted in the next BRA.

- Phase 2 would be implemented June 1, 202X.
 - 202X is the first year for which the E&AS revenues using the \$2,000/MWh PF can be reflected in the E&AS offset, if that mechanism is employed.