Outline of Revisions to PJM Tariff, Attachment DD To Implement PJM's Initial Recommendations for the Triennial Review

<u>Section 2.58 "Reference Resource"</u> [Design Component - Reference Resource Technology]

• Revise definition to state that Selective Catalytic Reduction (i.e., SCR) technology would be required for all CONE Areas. [This change is regardless of whether CONE Area 5 is eliminated and Dominion is grouped into CONE Area 3.]

Section 5.10(a)(i) "Methodology to Establish the Variable Resource Requirement Curve" [Design Component - VRR Curve Shape – System]

- Change the descriptions of how the three points setting the VRR Curve are determined to establish a convex curve that is right-shifted by one percent
 - o Point a) quantity = IRM 0.2%, price = greater (CONE or 1.5*Net CONE)
 - \circ Point b) quantity = IRM + 2.9%, price = 0.75*Net CONE
 - o Point c) quantity = IRM + 8.8%, price = 0

NEW Section 5.10(a)(ii-1) "Determination of Net CONE" [Design Component - Methods for calculating net CONE for each CONE Area and for each LDA]

- Determination of net CONE for each zone, rather than a net CONE determination for each CONE Area
- For determining the net CONE for an LDA comprises multiple zones, use the average of the net CONE values determined for all the zones in the LDA.
- If the net CONE of an LDA is less than the net CONE of an immediately higher Parent LDA or the RTO, as appropriate (example MAAC), use the Parent's or RTO's higher net CONE

<u>Section 5.10(a)(iv) "Cost of New Entry"</u> [Design Components - Gross CONE; Regionwide Gross CONE; Index used for CONE escalation]

- Subsection (A) [Gross CONE; Region-wide Gross CONE]
 - Update the PJM Region Gross CONE value to reflect the average of all CONE Areas

For instance, for 18/19 BRA (MW-year):

- \$146,150 (average of all 5 CONE Areas)
- \$147,350 (average of CONE Areas 1 thru 4)
- o Update the Gross CONE values for each CONE Area

For 18/19 BRA (MW-year):

- CONE Area 1: \$150,000
- CONE Area 2: \$148,400
- CONE Area 3: \$147,500
- CONE Area 4: \$143,500
- CONE Area 5: \$141,200

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- considering deleting CONE Area 5 and grouping Dominion in CONE Area 3
- Subsection (B) [Design Component Index used for CONE escalation]
 - o Change to "Beginning with the 2018-2019 Delivery Year . . . "
 - Switch from using the "Applicable H-W Index" to the "Bureau of Labor Statistics' indices for wages, materials and turbine" for the annual adjustments to the Gross CONE values
 - Make corresponding revisions to 5.10(a)(iv)(B)(1) through (3) to reflect both the switch the BLS indices and for this switch to become effective starting with the 2018-2019 Delivery Year...

Section 5.10(a)(v) "Net Energy and Ancillary Services Revenue Offset" [Design Component - Net E&AS Revenue Offset Methodology]

- Change to forward-looking net E&AS offset by determining a historic E&AS offset using the current peak hour dispatch method on a monthly basis and adjusting that value based on the ratio of the future market heat rate against the historic market heat rate. For each zone, the historic energy market prices will be the zonal energy market prices by month. For future energy market prices, posted prices by zone from CME Group will be used for the future year. For historic gas prices, prices from the relevant trading hub associated with the electric zone will be used, and for future gas prices, Henry Hub future prices will be used and adjusted by the nearest relevant trading point for basis differentials from Henry Hub.
- Add definitions (in Section 2 of Attachment DD) such as monthly historic market heat rates and future market heat rates and formulas for taking the historic peak hour dispatch and adjusting by the ration of future to historic market heat rates.

$$\text{Future E\&AS offset} = \sum_{y=1}^{3} (\sum_{m=1}^{12} \text{HE\&ASOy}, m * \frac{\text{FMHRm}}{\text{HMHRy}, m}))$$

HE&ASO = Historic Energy and Ancillary Service Offset

FMHR = future market heat rate

HMHR = Historic market heat rate

y = year

m = month

Section 5.14(h)(3) "MOPR Offer Floor Price" [CC MOPR Screen – Related Update; Gross CONE]

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- Update the Gross CONE values for both CTs and CCs
- Revisions to E&AS offset methodology for CCs and IGCCs to accommodate shift to forward-looking net E&AS offset methodology.

Other conforming changes

• Will review other aspects of tariff to determine if conforming changes are needed to accommodate changes such as to net E&AS offset, Net CONE for LDA, Net CONE for CONE Area.