

Mark Takahashi Chair, PJM Board of Managers

2750 Monroe Blvd. Audubon, PA 19403

VIA Electronic Delivery

September 22, 2022

Charlotte A. Mitchell, Esq. President, Organization of PJM States, Inc. (OPSI) Chair, North Carolina Utilities Commission 430 North Salisbury Street Dobbs Building-5th Floor Raleigh, NC 27603

Dear President Mitchell,

Thank you for your correspondence dated September 2, 2022 concerning the Quadrennial Review (QR) of the capacity market Variable Resource Requirement curve. We are always appreciative of the feedback we receive from the states in our footprint, including the OPSI body. The QR process began several months ago and culminated in advisory votes at the August 24 Markets & Reliability Committee (MRC) and Members Committee meetings. At these meetings, the PJM package, or "Package A," received the most support from the stakeholders. Please also note that an independent consultant, Brattle, made recommendations during the QR process which were incorporated into Package A.

Your letter voices support for the IMM package, or "Package B". Packages A and B are similar. Both utilize a combined cycle gas plant as the reference unit. Both utilize a forward energy & ancillary services (E&AS) calculation. Both would shift the Variable Resource Requirement (VRR) demand curve to the left. The packages differ, primarily, in the shape of the VRR curve. Package B proposes a more vertical design than Package A.

First, it's important to note that both Package A and Package B will work to reduce "over-procurement" of capacity resources. While PJM wouldn't necessarily agree with the cost characterization in your correspondence, the PJM Board does agree that the capacity market needs to be right-sized. Both Package A and Package B would do that by virtue of changing the reference resource from a combustion turbine to a combined cycle, utilizing a forward E&AS offset, and shifting the curve to the left. These changes, combined with adjustments made to the load forecast to reduce model error (recognizing behind the meter generation, energy efficient equipment and processes, etc.), should serve to right-size the capacity market.

In selecting Package A over Package B, the Board evaluated several factors. Package A was supported by robust analytics from consultant Brattle and the PJM staff that provided data points from both an economic as well as a reliability performance perspective. The Board believes that cost is but one factor in determining the appropriate curve shape, as reliability must also be balanced and considered. Package B asks for a more vertical slope than Package A. Very recently, MISO has been exploring with the Organization of MISO States and their Independent Market Monitor an effort to gravitate away from a vertically shaped demand curve due

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in large part to concerns around reliability.¹ As we continue on the trajectory of this energy transition, the PJM Board will be very mindful of these reliability concerns and will be working to balance reliability and cost for the 65 million consumers in the PJM footprint. Also please note that the QR is a process with defined periodicity. The Board will be sure to monitor any changes implemented as a result of this QR process to inform the next one, including the shape of the VRR curve.

Thank you again for your correspondence and for the appreciation expressed to PJM for the process advanced in the QR. We agree that it has provided an opportunity for robust stakeholder dialogue, and we express our gratitude to all stakeholders for their participation in the process.

Sincerely,

Mark Takahashi

Mark Takahashi Chair, PJM Board of Managers

cc: Manu Asthana, President & CEO, PJM Interconnection PJM Board of Managers

¹ https://www.misoenergy.org/stakeholder-engagement/MISO-Dashboard/sloped-demand-curve-in-the-capacity-market/