

PJM Comments Following the May 19, 2025 MIC Special Session – Quadrennial Review

Given the complexity of this topic, PJM is posting this document to clarify its position and proposal on specific sections of the MIC Special Session – Quadrennial Review and provide factual corrections to statements made during presentations by LS Power and the Independent Market Monitor (IMM) at the May 19, 2025, MIC Special Session meeting.

Quadrennial Review Process

The ongoing Quadrennial Review started at the MIC in September, with both PJM and Brattle presenting on the scope and overview of the process.¹ The previous Quadrennial Review filed in 2022 started in August, and schedule closely aligns with the ongoing schedule.² Brattle introduced several new ideas for consideration in this Quadrennial Review, some of which were ultimately adopted as formal recommendations.

MRI Curves

The MRI curve was considered during the previous Quadrennial Review,³ which concluded with a recommendation that PJM "consider a transition to a Marginal Reliability Impact (MRI)-based approach..." in the final VRR Curve report.⁴ The MRI curve concept was reintroduced during the ongoing Quadrennial Review at the December MIC Special Session.⁵ Brattle's final VRR Curve Report included a recommendation to adopt the MRI curve design.⁶

Reference Price

The Reference Price concept was introduced at the February MIC Special Session,⁷ and the CONE Report included a recommendation to adopt it.⁸

See, Sixth Review of PJM's RPM VRR Curve Parameters, The Brattle Group, September 27, 2024, https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2024/20240927-special/item-01b---sixth-review-of-pims-rpm-vrr-curve-parameters---brattle-presentation.pdf.

See, VRR Quadrennial Review Tariff Requirements, PJM, August 6, 2021, https://www.pjm.com/- /media/DotCom/committees-groups/committees/mic/2021/20210806-special/20210806-item-02-pjm-vrr-tariff-requirements.pdf.

See, Fifth Review of the Variable Resource Requirement Curve: Preliminary Assessment of the VRR Curve Shape, The Brattle Group, December 8, 2021, https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2021/20211208/20211208-item-03-brattle-preliminary-assessment-of-the-vrr-curve-shape.pdf, slide 6.

Fifth Review of PJM's Variable Resource Requirement Curve for Planning Years Beginning 2026/27, The Brattle Group, April 19, 2022, https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2022/20220422-special/brattle-pjm-fifth-vrr-curve-study-2026-27---final.pdf, page viii.

Sixth Review of the PJM's RPM VRR Curve Parameters Preliminary VRR Curve Analysis, The Brattle Group,
December 17, 2024, https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2024/20241217-special/item-1-a-2024-12-17-updated-pjm-qr-vrr-curve-deck_december-meeting.pdf, slide 16.

⁶ Id. Recommendation 1. Recommended System VRR Curve Based on Marginal Reliability Impact.

Sixth Review of PJM's RPM VRR Curve Parameters Updated Gross CONE and VRR Curve Analysis, The Brattle Group, February 21, 2025, https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2025/20250221-special/pjm-qr-cone-and-vrr-curve-deck.pdf, slide 28.

⁸ Id. Section VIII. Net CONE Benchmarks and Proposed VRR Curve Reference Prices, page 75.



Reliability Backstop Mechanism

Potential enhancements to the Reliability Backstop Mechanism were introduced during the February MIC Special Session,⁹ and the VRR Curve Report included a recommendation to implement the mechanism.¹⁰

Agenda Item 1b: LS Power's Presentation¹¹

1. Slides 2, 5, and 6: LS Power asserts that the Quadrennial Review process is inconsistent with the Tariff requirements.

PJM is compliant with the tariff for the ongoing Quadrennial Review as outlined in OATT Attachment DD Section 5.10.¹²

The review of the performance of the Variable Resource Requirement (VRR) curve has been completed, as detailed in the VRR Report prepared by Brattle. The report includes simulation of market conditions to quantify the ability of the market to support investment in new Capacity Resources and meet the applicable reliability requirements on a probabilistic basis. ¹³ PJM has not yet proposed whether to modify or retain the existing Variable Resource Requirement Curve shape, but plans to present a proposal package at the June 10 MIC Special Session – Quadrennial Review.

The review of the Cost of New Entry for each CONE Area has been completed, with detailed findings presented in the CONE Report prepared by Brattle.¹⁴

The review of the Net Energy and Ancillary Services Revenue Offset for the PJM region and for each Zone has been completed, with detailed findings in the CONE Report prepared by Brattle.¹⁵

⁹ *Id.* Slide 31.

¹⁰ *Id.* Recommendation 3.2, page 11.

See, 2024/2025 Quadrennial Review Perspectives, LS Power, May 19, 2025, https://www.pjm.com/-media/DotCom/committees-groups/committees/mic/2025/20250519-special/item-01b---ls-power-quadrennial-review-perspective.pdf.

OATT Attachment DD Section 5.10, https://agreements.pjm.com/oatt/5151.

See, Sixth Review of PJM's Variable Resource Requirement Curve, The Brattle Group, April 9, 2025, https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2025/20250411-special/item-1-03-sixth-review-of-pjm-vrr-curve.pdf. Section V. A. Current Curve vs MRI-Based Curves (Base Assumptions), page 49.

See, Brattle 2025 CONE Report for PJM, Informing Parameters for PJM's RPM Auctions for Delivery Year 2028/29 through 2031/32, The Brattle Group, April 9, 2025, https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2025/20250411-special/item-1-02-revised-cone-report-final.pdf. Table 23: Gross CONE Benchmarks per CONE Area, page 78.

Id. Section VII. Review of E&AS Methodology, page 70.



2. Slide 3: LS Power asserts that including the Brattle recommendations into the process Matrix as the initial solution is different than in prior years.

PJM has historically included Brattle's recommendations as part of the initial solution in past Quadrennial Reviews. Both the 2018 and 2022 reviews incorporated Brattle's recommendations into the initial stakeholder matrix.¹⁶¹⁷

Agenda Item 1c: Independent Market Monitor's Presentation¹⁸

3. Slide 17: IMM states that Brattle's proposed Reference Price Calculation follows the steps outlined.

Brattle clarified the Reference Price is calculated using nine sensitivities by first determining the 33rd percentile of the median values by LDA, then taking the median of those nine values, and finally applying rounding.

 Slide 20: IMM's states Brattle's Reliability Backstop Mechanism requires procurement if short of 99% of the Reliability Requirement after one year.

Brattle clarified that the backstop procurement recommendation is for PJM and stakeholders to "consider whether the current mechanism offers sufficient reliability protections on whether enhancements to the mechanism are warranted". ¹⁹ The VRR Curve Report acknowledges that this discussion is out of formal scope of the Quadrennial Review; however, Brattle still offers perspectives on potential areas for improvement. ²⁰

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ltem 04 – Quadrennial Review Matrix, June 17, 2022. https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2022/20220621-special-session-quad/item-04---quadrennial-review-matrix.xls.

ltem 4 – Quadrennial Review Matrix, June 22, 2018. https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/20180622-special/20180622-item-04-quadrennial-review-matrix.xls.

See, Quadrennial Review Issues, Monitoring Analytics, May 19, 2025, https://www.pjm.com/-/media/DotCom/committees-groups/committees/mic/2025/20250519-special/item-01c---imm-mic-quadrennial-review-perspective.pdf.

VRR Curve Report, page 11.

²⁰ *Id.* page 72.