

2024/2025 Long-Term Market Efficiency Window 1 - Questions and Answers

Window Project Evaluation Introduction

For the purpose of this window, PJM will perform a series of analyses to evaluate the economic performance of transmission proposals submitted to relieve the identified congestion drivers.

The solicitation window is being conducted under the Market Efficiency component of the Regional Transmission Expansion Plan (RTEP). As part of this process, PJM identifies the economic benefit of proposed transmission projects by conducting production cost simulations. These simulations show the extent to which congestion is mitigated by the project for specific study year transmission and generation dispatch scenarios. Economic benefits are determined by comparing future-year simulations both with and without the transmission proposal.

PJM calculates a benefit-to-cost ratio to determine if there is market efficiency justification for a particular transmission enhancement. The benefit-to-cost ratio is calculated by comparing the net present value of annual benefits for a 15 year period starting with the RTEP year compared to the net present value of the project's revenue requirement for the same 15-year period. Market efficiency transmission proposals that meet or exceed a 1.25 benefit-to-cost ratio threshold are further assessed to examine their economic, system reliability and constructability impacts.

The metrics and methods used to determine economic benefits are described in:

- PJM Operating Agreement, Schedule 6, Section 1.5.7:
- PJM Manual 14B, Section 2.6:
- Market Efficiency Process Training Material:

PJM's Market Efficiency evaluation will include a number of load, fuel price, and generation sensitivities that help determine the extent to which the evaluated transmission solutions perform or comparatively differ in their market-related impacts, risks, and risk mitigation.

<u>PJM's Manual 14F</u> provides an overview of the Competitive Planning Process. In particular, Section 8 describes Project Evaluation and Section 8.2 focuses on Market Efficiency Project Evaluation.



Economic Evaluation Questions and Responses

- 1. Is the B/C ratio a strict threshold for the acceptance of any solutions?
- PJM: If by "acceptance" you mean "approve" then the answer is yes. PJM accepts all properly submitted proposals, however only the ones passing the B/C ratio can be selected for approval by the PJM Board.
- 2. What other selection criteria are considered when solutions meet the B/C ratio requirement?
- PJM: See <u>PJM's Manual 14F</u> Section 8. See <u>Market Efficiency Process Training Material</u> Slides 63, 64.
- 3. Are there any concerns if the benefits of a solution are primarily realized in later years, such as 2032 and beyond?
- PJM: See <u>Market Efficiency Process Training Material</u> Slide 89. Benefits are calculated over a 15 years horizon.
- 4. If a solution meets the B/C ratio requirement but incurs higher costs due to addressing non-qualified congestions, will PJM still consider such a solution?
- PJM: See <u>Market Efficiency Process Training Material</u> Slide 63 regarding PJM considering "Overall PJM Congestion".

The solution would be considered, but project selection would be evaluated on a case by case basis and may depend on the specific local context.



Document Revision History

5/05/2025 - V1 - Original 20242025 Long-Term Market Efficiency Window 1 FAQ posted to the PJM Competitive Planning Process webpage: <u>https://www.pjm.com/planning/competitive-planning-process.aspx</u>.