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| NPRR Number | [1286](https://www.ercot.com/mktrules/issues/NPRR1286) | NPRR Title | Establish Multi-Value Criteria for Resiliency-Related Transmission Project Evaluation |
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| Date | | July 1, 2025 | |
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| Market Segment | | Independent Generator | |

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| Comments |

Nodal Protocol Revision Request (NPRR) 1286 proposes changes to the same section as NPRR1070, Planning Criteria for GTC Exit Solutions, which is also introducing criteria impacting system resiliency. For efficiency in resolving outstanding Revision Requests, given the overlap in the two NPRRs and the fact that several of the proposed changes in NPRR1070 have been implemented via other Revision Requests, Joint Commenters submit these suggested edits to the proposed protocol revisions incorporating stakeholder and staff feedback.

New edits include:

1. Add new paragraphs (8) and (9) to Section 3.11.2, Planning Criteria, with the concepts:
   1. Improve transparency in project analyses by communicating observed expected impacts to Generic Transmission Constraints (GTCs).
   2. Recognize the incremental value to the system in eliminating a GTC. Note, the numbers are placeholders and Joint Commenters anticipate discussion and input from stakeholders and staff to refine the values for how many GTCs become operationally problematic and the average incremental value of eliminating one GTC when beyond that number.
   3. Explicitly allow for sponsorship from stakeholders to reduce the realized cost of upgrades. While this is currently understood to be allowed, it is not explicitly stated.
   4. Include the one remaining item of NPRR1070: to allow ERCOT staff to develop a study methodology to estimate the incremental value of the benefit to serving system load by releasing generation trapped behind GTCs.

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| Revised Cover Page Language |

None

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| Revised Proposed Protocol Language |

3.11.2 Planning Criteria

(1) ERCOT and Transmission Service Providers (TSPs) shall evaluate the need for transmission system improvements and the relative value of alternative improvements based on established reliability, economic, and multi-value criteria.

(2) The reliability criteria are established by the Planning Guide, Operating Guides, and the North American Electric Reliability Corporation (NERC) Reliability Standards.

(3) ERCOT shall attempt to meet these reliability criteria as economically as possible and shall actively study the need for economic projects to meet this goal.

(4) For economic projects, the net economic benefit of a proposed project, or set of projects, will be assessed over the project’s life based on the net benefit that is reasonably expected to accrue from the project as demonstrated through the production cost savings test or the congestion cost savings test. The current set of financial assumptions upon which the revenue requirement calculations for these tests are based will be reviewed annually, updated as necessary by ERCOT, and posted on the ERCOT website. The expected economic benefits are based on chronological simulations of the security-constrained unit commitment and economic dispatch of the generators connected to the ERCOT Transmission Grid to serve the expected ERCOT System Load over the planning horizon, comparing simulations with and without the project. These market simulations are intended to provide a reasonable representation of how the ERCOT System is expected to be operated over the simulated time period. From a practical standpoint, it is not feasible to perform these simulations for the entire 30 to 40 year expected life of the project. Therefore, the economic benefits are projected over the period for which simulations are feasible, which is the planning horizon established in Planning Guide Section 3.1.1.2, Regional Transmission Plan, and a qualitative assessment is made of whether the factors driving the economic benefits due to the project can reasonably be expected to continue.

(5) To determine the economic benefits of a proposed project under the production cost savings test, the revenue requirement of the capital cost of the project is compared to the expected savings in system production costs resulting from the project over the expected life of the project. Outputs from the market simulations described in paragraph (4) above will be used to provide an estimate of the expected reduction in total system-wide production cost due to the project. Other adequately quantifiable and ongoing direct and indirect costs and benefits to the transmission system attributable to the project may be considered as appropriate. If the levelized ERCOT-wide annual production cost savings equals or exceeds the first-year annual revenue requirement of the transmission project, the project will be deemed to demonstrate sufficient economic benefit and will be recommended. ERCOT will publish requested non-confidential modeling inputs, assumptions, and outputs utilized in the production cost savings test if that information can be feasibly provided.

(6) To determine the economic benefits of a proposed project under the congestion cost savings test, the revenue requirement of the capital cost of the project is compared to the expected system-wide consumer energy cost reduction resulting from the project over the expected life of the project. Outputs from the market simulations described in paragraph (4) above will be used to provide an estimate of the expected reduction in total system-wide consumer energy cost due to the project. In the market simulations, system-wide consumer energy cost will be calculated using hourly load in MWh multiplied by hourly load nodal energy prices in $/MWh. Other adequately quantifiable and ongoing direct and indirect costs and benefits to the transmission system attributable to the project may be considered as appropriate. If the levelized system-wide consumer energy cost reduction equals or exceeds the average of the first three years’ annual revenue requirement for the project, the project will be deemed to demonstrate sufficient economic benefit and will be recommended. ERCOT will publish requested non-confidential modeling inputs, assumptions, and outputs utilized in the congestion cost savings test if that information can be feasibly provided.

(7) To meet multi-value criteria, a project submitted as a reliability or economic project must, both, address a resiliency issue identified in a Grid Reliability and Resiliency Assessment (GRRA) required by Planning Guide Section 3.1.1.6, Grid Reliability and Resiliency Assessment (GRRA), and meet at least one of the below criteria, as demonstrated using the cases published in the Regional Transmission Plan:

(a) Prevent thermal loading above 90% of the applicable ratings for planning events in which non-consequential load loss is prohibited as established by the Planning Guide and NERC Reliability Standards;

(b) Prevent voltage levels within 0.01 per unit of the applicable limits for planning events in which non-consequential load loss is prohibited as established by the Planning Guide and NERC Reliability Standards;

(c) Result in levelized ERCOT-wide annual production cost savings of at least 90% of the first-year annual revenue requirement of the project; or

(d) Result in levelized system-wide consumer energy cost reduction of at least 90% of the average of the first three years’ annual revenue requirement of the project.

(8) In order to improve system stability and resiliency by resolving identified Generic Transmission Constraints (GTCs) and/or improving Generic Transmission Limits (GTLs) ERCOT will:

(a) Show for all transmission project evaluations whether the project provides exit solutions for resolving nearby GTCs or increases any GTLs;

(b) Endorse any GTC solution option that is within $20 million of meeting the cost-to-benefit criteria when there are more than five GTCs, in order to reflect the intangible resiliency value of reducing the number of GTCs impacting system operations; and

(c) Allow individual stakeholder(s) to pay for the additional difference above the threshold in paragraph (8)(b) above. ERCOT will endorse that option when stakeholder(s) demonstrate commitment to pay the additional cost.

(9) When evaluating the economic benefits of GTC exit solutions or projects that improve GTLs, in addition to the savings described in paragraphs (5) and (6) above, the impact of GTCs on generation available to serve system load during Emergency Conditions may be evaluated. Any information available from generation adequacy studies or resiliency studies that consider a range of system conditions may be used to estimate the value of improved deliverability of generation due to relieving GTCs.