



Steady State Voltage Performance Criteria for GMD Vulnerability Assessments (GMDVAs)

Ping Yan
Supervisor, Regional Transmission Planning

October 15, 2021

NERC Reliability Standard TPL-007-4 and ERCOT Planning Guide Requirements

- NERC TPL-007-4 requirement 3

R3. Each responsible entity, as determined in Requirement R1, shall have criteria for acceptable System steady state voltage performance for its System during the GMD events described in Attachment 1. *[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*

- ERCOT Planning Guide Section 3.1.8

(3) ERCOT and the TSPs shall develop for approval by the TAC, criteria for acceptable steady-state voltage performance during the benchmark and supplemental GMD events.

GMDVA Steady State Voltage Performance Criteria Discussion Recap

- Based on preliminary GMDVA study results, ERCOT recommended using the same steady state voltage criteria used in other planning studies following the GMD events
- ERCOT's recommendation was presented to RPG and PGDTF in 2020 and 2021

[PGDTF April 2020 Presentation](#)

[PGDTF May 2021 Presentation](#)

[PGDTF September 2021 Presentation](#)

[RPG July 2020 Presentation](#)

[RPG May 2021 Presentation](#)

- No comments were received following those presentations
- ERCOT plans to take the recommendation to TAC for approval

Proposed Steady State Voltage Performance Criteria

- The steady state voltage criteria outlined in Planning Guide Section 4.1.1.4, specifically the post contingency voltage performance criteria, will be used following the occurrence of the benchmark or supplemental GMD events
- The voltage deviation criteria outlined in Planning Guide Section 4.1.1.4 will be used following the occurrence of the benchmark or supplemental GMD events

Next Steps

- October TAC for approval



Questions or Comments?

GMDVA@ercot.com