



Supplemental GMDVA Scope and Process and Preliminary Findings

Minnie Han
Transmission Planning Assessment

May 2021 PGDTF

Supplemental Geomagnetic Disturbance Vulnerability Assessment (GMDVA)

- ERCOT presented an overview of the Supplemental GMDVA scope and preliminary findings at the May 2021 RPG meeting
- A draft of the Benchmark and Supplemental GMDVA Scope and Process is posted to the May 2021 RPG and PGDTF meeting pages

Key Differences in the Supplemental GMDVA Scope from the Benchmark GMDVA

- The NERC defined geoelectric field peak amplitude for the supplemental GMD event of 12 V/km will be used across the ERCOT system
- If applicable, suggested actions resulting from thermal impact assessments for transformers with maximum effective GIC flows exceeding the 85 A/phase supplemental GMD threshold will be incorporated
 - A thermal impact assessment was required for one transformer in the 2021 Supplemental GMDVA

Supplemental GMDVA: Supplemental GMD Event Caused Outages

- Market Notice M-A062118-07 PGRR requested Resource Entities and Transmission Service Providers (TSPs) to provide a list of potential equipment that may be removed from service as a result of Protection System operation or misoperation due to harmonics that could result from the supplemental GMD event
 - Currently received submissions have been applied to the cases
 - Thermal impact assessment has been included in the preliminary analysis

Preliminary Findings and Recommendation

- Based on currently received supplemental GMD event caused outages:
 - No low voltage violations
 - No potential cascading for BES
- No proposed changes to the steady state voltage performance criteria for both the benchmark and supplemental GMDVAs

Questions?

Please send any questions or comments to
GMDVA@ercot.com