



PRC-023 Relay Loadability Annual Evaluation for Requirement 6

Mark Kuras

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NERC Compliance

Reliability & Standards Compliance

Subcommittee

- On November 17, 2022 notification went out that the results from the Requirement 6 evaluation was available
- Requirement 6
 - Each Planning Coordinator shall conduct an assessment at least once each calendar year, with no more than 15 months between assessments, by applying the criteria in PRC-023-4, Attachment B to determine the circuits in its Planning Coordinator area for which Transmission Owners, Generator Owners, and Distribution Providers must comply with Requirements R1 through R5.

- Requirement 6.2
 - Provide the list of circuits to all Regional Entities, Reliability Coordinators, **Transmission Owners, Generator Owners, and Distribution Providers within its Planning Coordinator area** within 30 calendar days of the establishment of the initial list and within 30 calendar days of any changes to that list
 - [PJM 2022 list of PRC-023-4 R6 facilities list](#)
 - [PRC-023 methodology, pages132-134](#)
 - Also sent to the **PJM Relay Subcommittee**

- Requirement 1
 - Each TO, GO, and DP shall use any one of the following criteria (Requirement R1, criteria 1 through 13) for any specific circuit terminal to prevent its phase protective relay settings from limiting transmission system loadability while maintaining reliable protection of the BES for all fault conditions. Each TO, GO, and DP shall evaluate relay loadability at 0.85 per unit voltage and a power factor angle of 30 degrees
 - Criteria 1 - Set transmission line relays so they do not operate at or below 150% of the highest seasonal Facility Rating of a circuit, for the available defined loading duration nearest 4 hours (expressed in amperes).
 - Criteria 2. Set transmission line relays so they do not operate at or below 115% of the highest seasonal 15-minute Facility Rating of a circuit (expressed in amperes).
 - Criteria 3 - 13

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