



PRC-002-2

Disturbance Monitoring and Reporting Requirements

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Transmission Planning
RSCS Meeting
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- **Purpose:**
 - To have adequate data available to facilitate analysis of Bulk Electric System (BES) Disturbances.
- **Emphasis:**
 - PRC-002-2 addresses what Bulk Electric System data is captured not on how Disturbance monitoring data is captured.
- **Effective Date:**
 - July 1, 2016

- **Standards for Retirement**

- PRC-002-1: June 30, 2016

- Define Regional Disturbance Monitoring and Reporting Requirements

- PRC-018-1: June 30, 2022

- PRC-018-1 Disturbance Monitoring Equipment Installation and Data Reporting

- TO/GO shall be compliant with PRC-018-1 until entity meets requirements of PRC-002-2 in accordance with **Project 2007-11 Disturbance Monitoring Implementation Plan**

- **5.1 Identify BES Elements for which dynamic Disturbance recording (DDR) data is required, including the following:**
 - **5.1.1 Generating resource(s) with:**
 - **5.1.1.1** Gross individual nameplate rating greater than or equal to 500 MVA.
 - **5.1.1.2** Gross individual nameplate rating greater than or equal to 300 MVA where the gross plant/facility aggregate nameplate rating is greater than or equal to 1,000 MVA.
 - PJM has identified 156 generating resources per R5.1.1
 - Information extracted from the 2021 RTEP case
 - Queue projects, deactivations & suspensions considered

- **5.1.2** Any one BES Element that is part of a stability (angular or voltage) related System Operating Limit (SOL).
 - PJM does not have a stability-related System Operating Limit (SOL) therefore not applicable.

- **5.1.3** Each terminal of a high voltage direct current (HVDC) circuit with a nameplate rating greater than or equal to 300 MVA, on the alternating current (AC) portion of the converter.
 - 2 circuits identified in Northern NJ area
 - Hudson Transmission Partners, LLC (PJM Queue O66)
 - Neptune Regional Transmission System, LLC (PJM Queue G07)

- **5.1.4** One or more BES Elements that are part of an Interconnection Reliability Operating Limit (IROL).
 - PJM's initial strategy is to choose only one BES element per IROL.
 - Future strategy could evolve due to new data & analysis
 - PJM has identified 10 BES Elements to coincide with the 10 Transfer Interfaces defined in PJM Manual 03.
 - One transmission line chosen from each Interface Definition
 - One terminal chosen on each transmission line

- **5.1.5** Any one BES Element within a major voltage sensitive area as defined by an area with an in-service undervoltage load shedding (UVLS) program.
 - PJM will not require TOs or GOs to supply DDR data for UVLS.
 - Since PJM neither owns nor operates a UVLS program, the requirement to collect DDR data on BES Elements within a major voltage sensitive area is not applicable to PJM.

- **5.2** Identify a minimum DDR coverage, inclusive of those BES Elements identified in Part 5.1, of at least:
 - **5.2.1** One BES Element; and
 - **5.2.2** One BES Element per 3,000 MW of the Responsible Entity's historical simultaneous peak System Demand.
 - No additional elements identified outside of Part 5.1.
 - Peak demand (5/29/15) – 165,492 megawatts
 - $165,492 \text{ MW} / 3000 \text{ MW} = 56 \text{ Elements}$

- **5.3** Notify all owners of identified BES Elements, within 90-calendar days of completion of Part 5.1, that their respective BES Elements require DDR data when requested.
 - PJM to send list out by July 1, 2016.

- **5.4** Re-evaluate all BES Elements at least once every five calendar years in accordance with Parts 5.1 and 5.2, and notify owners in accordance with Part 5.3 to implement the re-evaluated list of BES Elements as per the Implementation Plan.
 - PJM anticipates re-evaluating all BES Elements in 2021 at which time the impacted owners will be notified.



Questions?