

# Implementation Plan

## Project 2013-03 Geomagnetic Disturbance Mitigation Reliability Standard TPL-007-2

### Applicable Standard

- TPL-007-2 - Transmission System Planned Performance for Geomagnetic Disturbance Events

### Requested Retirement

- TPL-007-1 - Transmission System Planned Performance for Geomagnetic Disturbance Events

### Prerequisite Standard

None

### Applicable Entities

- *Planning Coordinator with a planning area that includes a Facility or Facilities specified in Section 4.2 of the standard;*
- *Transmission Planner with a planning area that includes a Facility or Facilities specified in Section 4.2 of the standard;*
- *Transmission Owner who owns a Facility or Facilities specified in Section 4.2 of the standard; and*
- *Generator Owner who owns a Facility or Facilities specified in Section 4.2 of the standard.*

Section 4.2 states that the standard applies to facilities that include power transformer(s) with a high-side, wye-grounded winding with terminal voltage greater than 200 kV.

### Terms in the NERC Glossary of Terms

There are no new, modified, or retired terms.

### Background

On September 22, 2016, the Federal Energy Regulatory Commission (FERC) issued Order No. 830 approving Reliability Standard TPL-007-1 and its associated five-year Implementation Plan. In the Order, FERC also directed NERC to develop certain modifications to the standard. FERC established a deadline of 18 months from the effective date of Order No. 830 for completing the revisions, which is May 2018.

### General Considerations

This Implementation Plan is intended to integrate the new requirements in TPL-007-2 with the GMD Vulnerability Assessment process that is being implemented through approved TPL-007-1. At the time of the May 2018 filing deadline, many requirements in approved standard TPL-007-1 that lead

to completion of the geomagnetic disturbance (GMD) Vulnerability Assessment will be in effect. Furthermore, many entities may be taking steps to complete studies or assessments that are required by future enforceable requirements in TPL-007-1. The Implementation Plan phases in the requirements in TPL-007-2 based on the effective date of TPL-007-2, as follows:

- **Effective Date before January 1, 2021.** Implementation timeline supports applicable entities completing new requirements for supplemental GMD Vulnerability Assessments concurrently with requirements for the benchmark GMD Vulnerability Assessment (concurrent effective dates).
- **Effective Date on or after January 1, 2021.** Implementation timeline supports applicable entities completing the benchmark GMD Vulnerability Assessments before new requirements for supplemental GMD Vulnerability Assessments become effective.

### **Effective Date**

The effective date for the proposed Reliability Standard is provided below. Where the standard drafting team identified the need for a longer implementation period for compliance with a particular section of the proposed Reliability Standard (e.g., an entire Requirement or a portion thereof), the additional time for compliance with that section is specified below. These phased-in compliance dates represent the dates that entities must begin to comply with that particular section of the Reliability Standard, even where the Reliability Standard goes into effect at an earlier date.

### **Standard TPL-007-2**

Where approval by an applicable governmental authority is required, the standard shall become effective on the first day of the first calendar quarter that is three (3) months after the effective date of the applicable governmental authority's order approving the standard, or as otherwise provided for by the applicable governmental authority.

Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is three (3) months after the date the standard is adopted by the NERC Board of Trustees, or as otherwise provided for in that jurisdiction.

### **Phased-In Compliance Dates**

#### ***If TPL-007-2 becomes effective before January 1, 2021***

Implementation timeline supports applicable entities completing new requirements for supplemental GMD Vulnerability Assessments concurrently with requirements for the benchmark GMD Vulnerability Assessment (concurrent effective dates).

### **Compliance Date for TPL-007-2 Requirements R1 and R2**

Entities shall be required to comply with Requirements R1 and R2 upon the effective date of Reliability Standard TPL-007-2.

**Compliance Date for TPL-007-2 Requirement R5**

Entities shall not be required to comply with Requirements R5 until six (6) months after the effective date of Reliability Standard TPL-007-2.

**Compliance Date for TPL-007-2 Requirement R9**

Entities shall not be required to comply with Requirement R9 until six (6) months after the effective date of Reliability Standard TPL-007-2.

**Compliance Date for TPL-007-2 Requirements R11 and R12**

Entities shall not be required to comply with Requirements R11 and R12 until 24 months after the effective date of Reliability Standard TPL-007-2.

**Compliance Date for TPL-007-2 Requirements R6 and R10**

Entities shall not be required to comply with Requirements R6 and R10 until 30 months after the effective date of Reliability Standard TPL-007-2.

**Compliance Date for TPL-007-2 Requirements R3, R4, and R8**

Entities shall not be required to comply with Requirements R3, R4, and R8 until 42 months after the effective date of Reliability Standard TPL-007-2.

**Compliance Date for TPL-007-2 Requirement R7**

Entities shall not be required to comply with Requirement R7 until 54 months after the effective date of Reliability Standard TPL-007-2.

***If TPL-007-2 becomes effective on or after January 1, 2021***

Implementation timeline supports applicable entities completing the benchmark GMD Vulnerability Assessments before new requirements for supplemental GMD Vulnerability Assessments become effective.

**Compliance Date for TPL-007-2 Requirements R1, R2, R5, and R6**

Entities shall be required to comply with Requirements R1, R2, R5, and R6 upon the effective date of Reliability Standard TPL-007-2.

**Compliance Date for TPL-007-2 Requirements R3 and R4**

Entities shall not be required to comply with Requirements R3 and R4 until 12 months after the effective date of Reliability Standard TPL-007-2.

**Compliance Date for TPL-007-2 Requirements R7, R11, and R12**

Entities shall not be required to comply with Requirements R7, R11, and R12 until 24 months after the effective date of Reliability Standard TPL-007-2.

#### **Compliance Date for TPL-007-2 Requirement R9**

Entities shall not be required to comply with Requirement R9 until 36 months after the effective date of Reliability Standard TPL-007-2.

#### **Compliance Date for TPL-007-2 Requirement R10**

Entities shall not be required to comply with Requirement R10 until 60 months after the effective date of Reliability Standard TPL-007-2.

#### **Compliance Date for TPL-007-2 Requirement R8**

Entities shall not be required to comply with Requirement R8 until 72 months after the effective date of Reliability Standard TPL-007-2.

#### **Retirement Date**

##### **Standard TPL-007-1**

Reliability Standard TPL-007-1 shall be retired immediately prior to the effective date of TPL-007-2 in the particular jurisdiction in which the revised standard is becoming effective.

#### **Initial Performance of Periodic Requirements**

Transmission Owners and Generator Owners are not required to comply with Requirement R6 prior to the compliance date for Requirement R6, regardless of when geomagnetically-induced current (GIC) flow information specified in Requirement R5, Part 5.1 is received.

Transmission Owners and Generator Owners are not required to comply with Requirement R10 prior to the compliance date for Requirement R10, regardless of when GIC flow information specified in Requirement R9, Part 9.1 is received.