Project 2021-01 System Model Validation with IBRs

Action

- Approve the following waiver of provisions of the Standard Processes Manual (SPM) for Project 2021-01 System Model Validation with IBRs:
  - Initial formal comment and ballot period reduced from 45 calendar days to as few as 35 calendar days, with ballot pools formed in the first 10 calendar days and initial ballot and non-binding poll of Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs) conducted during the last 10 calendar days of the comment period. (Sections 4.7, 4.9)
  - Additional formal comment and ballot period(s) reduced from 45 calendar days to as few as 15 calendar days, with ballot(s) conducted during the last 10 calendar days of the comment period. (Section 4.12)
  - Final ballot period reduced from 10 calendar days to 5 calendar days. (Section 4.9)
- Authorize posting proposed Project 2021-01 System Model Validation with IBRs proposed Reliability Standard MOD-033-3, and its associated Implementation Plan for an initial 35 calendar day formal comment and ballot period, with ballot pools formed in the first 10 calendar days, and initial ballots conducted during the last 10 calendar days of the comment period.

Background

The Federal Energy Regulatory Commission (FERC) issued Order No. 901 on October 19, 2023, which included directives on new or modified NERC Reliability Standard projects. FERC Order No. 901 addresses a wide spectrum of reliability risks to the grid from the application of Inverter Based Resources (IBR), including both utility scale and behind-the-meter or distributed energy resources. Within the Order, there are four milestones that include sets of directives to NERC. NERC Standards Development has identified three active projects (2020-06, 2021-01, and 2022-02) that are directly impacted by the associated FERC directives in Order No. 901.

In addition, to assist readers, please see the following additional documents drafted to help keep the NERC Milestone 3 projects organized:

- FERC Order No. 901 - Summary Information of Milestone 3
- FERC Order No. 901 - Summary Graphic of Milestone 3
- Standards Development Mapping of FERC Order 901 Directives and Other Guidance to Standards Development Projects

NERC Staff hosted a joint workshop from January 15-17, 2025, in Pheonix, AZ. During the workshop, NERC staff and drafting team members reviewed the FERC directives associated with Milestone 3 and talked through concerns of industry prior to the development or modification of each standard(s) with its associated project.

This one pager addresses Milestone 3 Project 2021-01 and the FERC directives covering the development of Reliability Standards to address concerns "related to IBRs at all stages of interconnection, planning, and operations." (Id. at P 25). Among other things, FERC directed NERC to revise MOD-033 to require System Model Validation against actual system operational behavior during Disturbances.

All new or modified Reliability Standards and associated Implementation Plans addressing Milestone 3 of Order No. 901 must be filed with FERC by November 4, 2025. NERC Project 2021-01 addresses two (2) FERC directives through modifications to MOD-033-3 in addition to the development of the implementation plan.

At the May 15, 2024, meeting, the Standards Committee (SC) accepted the Standards Authorization Request and assigned it to the Project 2021-01 Modifications to MOD-025 and PRC-019 drafting team (DT). This DT changed the name of the project to "Project 2021-01 System Model Validation with IBRs" and thereby addressed the FERC directives by developing draft Reliability Standard MOD-033-3 and its implementation plan.

A Quality Review for MOD-033-3 and its associated implementation plan was conducted from March 14 to March 24, 2025. Comments were received from NERC legal (Alain Rigaud, Lauren Perotti, and Sarah Crawford), NERC engineering (Hasala Dharmawardena), PMOS Representatives (Donovan Crane, WECC), and industry members (Sarah Habriga, AEP; Todd Bennett, AECI; and Sean Bodkin, Dominion Energy).

NERC Standard Processes Manual Section 16.0 Waiver provides as follows:

- The SC may waive any of the provisions contained in this manual for good cause shown, but limited to the following circumstances:
  - In response to a national emergency declared by the United States or Canadian governments that involves the reliability of the BES or cyber-attack on the BES;
  - Where necessary to meet regulatory deadlines;
  - Where necessary to meet deadlines imposed by the NERC Board of Trustees; or
  - Where the SC determines that a modification to a proposed Reliability Standard or its requirement(s), a modification to a defined term, a modification to an interpretation, or a modification to a variance has already been vetted by the industry through the standards development process or is so insubstantial that developing the modification through the processes contained in this manual will add significant time delay.

Summary

Project 2021-01 DT leadership and NERC staff request that the SC approve a waiver for certain provisions of the SPM regarding the length of comment periods and ballots in order to meet the November 2025 development deadline for Project 2021-01 as established by FERC.

Project 2021-01 DT leadership and NERC staff recommend the SC shorten the initial formal comment and ballot period for the standard developed under Project 2021-01 from 45 calendar days to as few as 30 calendar days and any additional formal comment and ballot period(s) from 45 calendar days to as few as 15 calendar days. In addition, the Project 2021-01 DT leadership and NERC staff request shortening the final ballot of the standard and implementation plan from 10 calendar days to as few as five (5) calendar days.

NERC Staff recommends the SC authorize initial formal comment and ballot period for Project 2021-01 System Model Validation with IBRs for a 30-calendar day formal initial ballot, with ballot pools formed in the first 10 calendar days, and initial ballots conducted during the last 10 calendar days of the comment period.