

Implementation Plan

Project 2022-02 Uniform Modeling Framework for IBR

Applicable Standard(s)

- Reliability Standard MOD-032-2 Data for Power System Modeling and Analysis

Requested Retirement(s)

- Reliability Standard MOD-032-1 Data for Power System Modeling and Analysis

Applicable Entities

- Balancing Authority
- Distribution Provider
- Generator Owner
- Planning Coordinator
- Resource Planner
- Transmission Owner
- Transmission Planner
- Transmission Service Provider

NERC Glossary of Terms

This section includes a newly defined term used in the NERC Reliability Standard. The new definition listed below becomes approved when the proposed standard is approved. When the standard becomes effective, the defined term will be removed from the individual standard and added to the Glossary.

Proposed New Definition:

Distributed Energy Resource (DER):

Generators and energy storage technologies connected to the Distribution Provider's system, including those connected behind the meter of an end use customer, that are capable of providing Real Power in non-isolated parallel operation with the Bulk-Power System.

- Distribution Provider refers to the NERC glossary definition, rather than an entity meeting the NERC registration criteria.

Background

As the penetration of distributed energy resources (DERs) continues to increase across the many distribution systems connected both directly and indirectly to the North American Bulk Power System (BPS), it is necessary to account for the potential impacts of DERs on reliability in the planning, operation, and design of the Bulk Electric System. The NERC System Planning Impacts of Distributed Energy Resources Working Group (SPIDERWG) has identified the need for improved modeling of aggregate DER for planning studies (including both utility-scale and retail-scale DER) conducted by Transmission Planners (TPs) and Planning Coordinators (PCs), including updated modeling data requirements specific to DER.

Proposed Reliability Standard MOD-032-2 replaces the Load-Serving Entity as an applicable entity with the Distribution Provider and updates Attachment 1: Data Reporting Requirements with data specific to DERs.

General Considerations

In developing this implementation plan, the drafting team (DT) considered the time that would be necessary to develop data requirements and reporting procedures for data related to DERs, including identifying the proper reporting entity. The DT also considered that the standard would become applicable to the Distribution Provider (DP) for the first time. Transmission Owners (TOs) and DPs would be expected to participate in PC/TP processes to change data reporting requirements related to DER developed during the 24 months prior to the effective date of Requirement R1 and should be able to start working on data collection processes and methods more than 12 months prior to the effective dates of Requirements R2, R3, and R4. In summary, this would give a full 36 months from FERC approval until data is required to be reported.

Effective Date and Phased-In Compliance Dates

The effective date for the proposed Reliability Standard and NERC Glossary term Distributed Energy Resource is provided below. Where the standard drafting team identified the need for a longer implementation period for compliance with a particular section of a proposed Reliability Standard (i.e., an entire Requirement or a portion thereof), the additional time for compliance with that section is specified below. The phased-in compliance date for those particular sections represents the date 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.

Reliability Standard MOD-032-2

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 twenty-four (24) 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 twenty-four (24) months after the date

the standard is adopted by the NERC Board of Trustees, or as otherwise provided for in that jurisdiction.

Compliance Date for Reliability Standard MOD-032-2 Requirements R2, R3, and R4

Entities shall not be required to comply with Requirements R2, R3, and R4 relating to revised PC/TP data requirements and reporting procedures developed under MOD-032-2 Requirement R1 and Attachment 1 until 12 months after the effective date of Reliability Standard MOD-032-2.

Definition – Distributed Energy Resource (DER)

Where approval by an applicable governmental authority is required, the definition of DER shall become effective on the first day of the first calendar quarter that is twenty-four (24) months after the effective date of the applicable governmental authority's order approving Reliability Standard MOD-032-2, or as otherwise provided for by the applicable governmental authority.

Where approval by an applicable governmental authority is not required, the definition shall become effective on the first day of the first calendar quarter that is twenty-four (24) months after the date that Reliability Standard MOD-032-2 is adopted by the NERC Board of Trustees, or as otherwise provided for in that jurisdiction.

Retirement Date

Reliability Standard MOD-032-1

Reliability Standard MOD-032-1 shall be retired immediately prior to the effective date of Reliability Standard MOD-032-2 in the particular jurisdiction in which the revised standard is becoming effective.

Initial Performance Dates

Entities shall not be required to comply with Requirements R2, R3, and R4 relating to revised PC/TP data requirements and reporting procedures developed under MOD-032-2 Requirement R1 and Attachment 1 until 12 months after the effective date of Reliability Standard MOD-032-2.

Entities shall continue to comply with Requirements R2, R3, and R4 related to PC/TP data requirements and reporting procedures developed under MOD-032-1 Requirement R1 and Attachment 1 during the phased-in compliance period for MOD-032-2.