

## Implementation Plan

### Project 2023-01 EOP-004 IBR Event Reporting Reliability Standard EOP-004-5

#### Applicable Standard(s)

- EOP-004-5 Event Reporting

#### Requested Retirement(s)

- EOP-004-4 Event Reporting

#### Prerequisite Standard(s)

These standard(s) or definitions must be approved before the Applicable Standard becomes effective:

- None

#### Applicable Entities

- Reliability Coordinator
- Balancing Authority
- Transmission Owner
- Transmission Operator
- Generator Owner
- Generator Operator
- Distribution Provider

#### New/Modified/Retired Terms in the NERC Glossary of Terms

- None

#### Background

Following multiple widespread solar PV loss events, NERC published the San Fernando disturbance report<sup>1</sup> in November 2020, which identified a set of recommendations for industry. The NERC Inverter-Based Resource Performance Subcommittee performed a follow-up analysis to identify any actions needed to address the recommendations laid out by NERC. One of the recommendations was for IRPS to draft a SAR to address the issue identified in EOP-004 regarding the generation loss criteria so that the reporting criteria will capture inverter-based resource (IBR) events as well synchronous

<sup>1</sup> [https://www.nerc.com/pa/rrm/ea/Documents/San\\_Fernando\\_Disturbance\\_Report.pdf](https://www.nerc.com/pa/rrm/ea/Documents/San_Fernando_Disturbance_Report.pdf)

generation. The thresholds for generation loss reporting in EOP-004-4 are relatively large and more suitable for synchronous generation. They are not aligned with the past large scale IBR disturbances analyzed by the ERO, which caused widespread grid disturbances but were not required to be reported as they did not meet the EOP-004 thresholds.

The revised Project 2023-01 EOP-004 IBR Event Reporting Standard Authorization Request (SAR) was accepted by the standards committee on May 17, 2023. The Reliability Standard revisions proposed by this project will help enhance the reliability of the Bulk Power System by ensuring timely reporting of events involving IBRs to the ERO. The new reporting criteria thresholds for IBR are tailored to the nature of IBR events and will ultimately lead to a more rapid response to widespread IBR losses and improved generation performance.

## **General Considerations**

This implementation plan provides that entities shall have twenty-four (24) months to become compliant with the revised Reliability Standard. This implementation plan reflects consideration that entities will need time to revise their event reporting Operating Plan and related procedures to include the new event types under Reliability Standard EOP-004-5 Attachment 1. Particular consideration has also been given to the fact that not all Balancing Authorities that will have reporting responsibilities for the two new added criteria currently possess the capability of timely detection of a loss of IBRs at the threshold specified in the revised standard. A twenty-four (24) month implementation period reflects the needs of these entities to revise data specifications and create additional SCADA tags, and for the asset owners and operators in their balancing areas to be able to submit the additional data. The implementation plan reflects the fact that data will need to be incorporated into networking models, possibly necessitating custom vendor solutions. New calculations and alarming criteria will need to be created to alert staff that the threshold for IBR loss has been reached as well as additional log files created to support analysis.

## **Effective Date**

### **Reliability Standard EOP-004-5**

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.

## **Retirement Date**

### **Reliability Standard EOP-004-4**

Reliability Standard EOP-004-4 shall be retired immediately prior to the effective date of EOP-004-5 in the particular jurisdiction in which the revised standard is becoming effective.