

Implementation Plan

Project 2010-01 Operations Personnel Training

Implementation Plan for PER-005-2 – Operations Personnel Training

Approvals Required

PER-005-2 – Operations Personnel Training

Prerequisite Approvals

There are no other standards that must receive approval prior to the approval of this standard.

Revisions to Glossary Terms

This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms (Glossary) are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.

System Operator: An individual at a Control Center of a Reliability Coordinator, Balancing Authority, or Transmission Operator who operates or directs the operation of the Bulk Electric System in Real-time.

Operations Support Personnel: Individuals who perform current day or next day outage coordination or assessments, or who determine SOLs, IROLs, or operating nomograms,¹ in direct support of Real-time operations of the Bulk Electric System.

Other Definitions Used within the Standard

None

Applicable Entities

- Reliability Coordinator
- Balancing Authority
- Transmission Operator

¹ Nomograms are used in the WECC Region to describe element operating limits.

- Transmission Owners that has personnel, excluding field switching personnel, who can act independently to operate or direct the operation of the Transmission Owner's Bulk Electric System transmission facilities in Real-time
- Generator Operators that have dispatch personnel at a centrally located dispatch center who receive direction from the Generator Operator's Reliability Coordinator, Balancing Authority, Transmission Operator, or Transmission Owner and may develop specific dispatch instructions for plant operators under their control. These personnel do not include plant operators located at a generator plant site or personnel at a centrally located dispatch center who relay dispatch instructions without making any modifications.

Applicable Facilities

None

Conforming Changes to Other Standards

None

Effective Dates

PER-005-2 shall become effective as follows:

This standard shall become effective the first day of the first calendar quarter that is 24 months beyond the date that this standard is approved by an applicable governmental authority or is otherwise provided for in a jurisdiction where approval by an applicable authority is required for a standard to go into effect.

Where approval by an applicable governmental authority is not required, this standard shall become effective on the first day of the first calendar quarter that is 24 months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

Actions to be Completed as of the Effective Date:

An implementation period provides time for an entity to become compliant with the standard prior to the standard becoming enforceable. This section describes the requirements that an entity must be compliant with as of the enforceable date of PER-005-2. This section does not address evidence of compliance; see measures, compliance input and RSAWs for further information regarding possible evidence.

Requirement R1:

Reliability Coordinators, Balancing Authorities, and Transmission Operators must have completed the requirements for PER-005-2 Requirement R1 as of the enforceable date of the standard as provided below. Note that these entities are subject to PER-005-1.

- R1: Entities must have developed and implemented a training program for its System Operators using a systematic approach.
- 1.1: Entities must have defined and documented its methodology for creating a list of Bulk Electric System (BES) company-specific Real-time reliability-related tasks, and must have a list of these tasks.
- 1.1.1: Entities must have conducted a review of its tasks list once in the calendar year that this standard becomes enforceable.
- Note: this review may be conducted either under the existing standard PER-005-1 or under PER-005-2 after it becomes enforceable, as long as the entity conducts one review during the calendar year.
- 1.2: An entity must have completed the design and development of training materials as necessary under its training program as of the enforceable date of PER-005-2. An entity is not obligated to have designed and developed training materials for all future training.
- 1.3: Entities must have delivered training in accordance with their training program as of the enforceable date of PER-005-2.
- 1.4: Entities must have conducted an evaluation once in the calendar year that PER-005-2 becomes enforceable.
- Note: this may be conducted either under PER-005-1 or under PER-005-2 after it becomes enforceable, as long as the entity conducts one evaluation during the calendar year.

Requirement R2:

- R2: Applicable Transmission Owners must have developed and implemented a training program for its applicable personnel using a systematic approach.
- 2.1: An applicable Transmission Owner must have defined and documented its methodology for creating a list of BES company-specific Real-time reliability-related tasks, and must have a list of these tasks as of the enforceable date of PER-005-2.
- 2.1.1: As applicable Transmission Owners were not previously subject to PER-005-1, they would not be required to have conducted a review prior to the enforceable date of the proposed standard or in the calendar year that the proposed standard becomes enforceable. The entity's first required evaluation would occur within the first calendar year following the enforceable date of PER-005-2.

- 2.2: An applicable Transmission Owner must have completed the design and development of training materials according to its training program as of the enforceable date of PER-005-2. An entity is not obligated to have designed and developed training materials for all future training.
- 2.3: As applicable Transmission Owners were not previously subject to PER-005-1, they must begin to implement training in accordance with its training program as of the enforceable date. Under the standard, these entities are not required to have delivered training prior to the enforceable date.
- 2.4: As applicable Transmission Owners were not previously subject to PER-005-1, they would not be required to have conducted an evaluation prior to the enforceable date of the proposed standard or in the calendar year that the proposed standard becomes enforceable. The entity's first required evaluation would occur within the first calendar year following the enforceable date of PER-005-2.

Requirement R3:

- R3: Reliability Coordinators, Balancing Authorities, Transmission Operators and Transmission Owners must have verified the capabilities of its personnel identified in Requirements R1 and R2 to perform each of its assigned BES company-specific Real-time reliability-related tasks, at least once, as of the enforceable date of PER-005-2.
 - 3.1: Reliability Coordinators, Balancing Authorities, and Transmission Operators that are already subject to PER-005-1 are required to, within six months of a change to its task list, have verified the capabilities of its personnel identified in Requirement R1 to perform each new or modified BES company-specific Real-time reliability-related tasks identified in Requirement R1 part 1.1. These entities will continue to have the time allotted to complete the verification under PER-005-1 after the enforceable date of PER-005-2.

Because Transmission Owners were not previously subject to PER-005-1, they are not expected to have verified the capabilities of its personnel identified in Requirement R2 to perform a new or modified BES company-specific Real-time reliability-related tasks identified under Requirement R2 part 2.1 prior to the enforceable date of the standard. This requirement pertains to BES company-specific reliability-related tasks that are newly identified or modified after the enforceable date of PER-005-2.

Requirement R4:

- R4: Reliability Coordinators, Balancing Authorities, Transmission Operators and Transmission Owners must be providing training using the simulation technologies described in Requirement R4 according to its training program as of the date PER-005-2 becomes enforceable.
- 4.1: Entities that do not meet the criteria set forth in Requirement R4 prior to the enforceable date of the standard are required to comply with Requirement R4 within 12 months of meeting the criteria.

Requirement R5:

- R5: Reliability Coordinators, Balancing Authorities, and Transmission Operators must have developed training, using a systematic approach, for their Operations Support Personnel on the impact of their job function(s) to those BES company-specific Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1 and must have implemented that training according to its systematic approach as of the enforceable date of PER-005-2.
- 5.1: As Operations Support Personnel were not previously subject to PER-005-1, they would not be required to have conducted an evaluation prior to the enforceable date of the proposed standard or in the calendar year that the proposed standard becomes enforceable. The entity's first required evaluation would occur within the first calendar year following the enforceable date of PER-005-2.

Requirement R6:

- R6: Generator Operators must have developed training, using a systematic approach, for their applicable personnel on the impact of their job function(s) to the reliable operations of the BES during normal and emergency operations and must have implemented that training according to its systematic approach as of the enforceable date of PER-005-2.
- 6.1: As Generator Operators were not previously subject to PER-005-1, they would not be required to have conducted an evaluation prior to the enforceable date of the proposed standard or in the calendar year that the proposed standard becomes enforceable. The entity's first required evaluation would occur within the first calendar year following the enforceable date of PER-005-2.

Justification

The 24-month period for implementation of PER-005-2 will provide sufficient time for the applicable entities to make necessary modifications to their systematic approach to training and, for entities not yet subject to the standard, time to develop a systematic approach to training that is compliant with the proposed standard. This time frame is consistent with the 24-month implementation period FERC approved for PER-005-1 to allow for Reliability Coordinators, Balancing Authorities, and Transmission

Operators to develop a systematic approach to training. The standard drafting team concluded that the same timeframe (24-months) should be provided to the new applicable entities and for the entities currently subject to PER-001-1 to development training for their Operations Support Personnel.

Retirements

PER-005-1 – System Personnel Training should be retired at 11:59:59 pm of the day immediately prior to the enforceable date of PER-005-2 in the particular jurisdiction in which the new standard is becoming enforceable. For entities that are completing actions under Requirement R3.1 of PER-005-1, this requirement will remain in effect until the time allotted under the requirement has expired.

Attachment 1
Approved Standards Incorporating the Term “System Operator”

EOP-005-2 — System Restoration from Blackstart Resources

EOP-006-2 — System Restoration Coordination

EOP-008-1 — Loss of Control Center Functionality

IRO-002-3 — Reliability Coordination – Analysis Tools

IRO-014-1 — Procedures, Processes, or Plans to Support Coordination between Reliability Coordinators

MOD-008-1 — TRM Calculation Methodology

MOD-020-0 — Providing Interruptible Demands and DCLM Data

PER-003-1 — Operation Personnel Credentials

PRC-004-WECC-1 – Protection System and Remedial Action Scheme Maintenance and Testing

PRC-023 -2 — Transmission Relay Loadability