

**Implementation Plan for PER-005-1 — System Personnel Training**

**Prerequisite Approvals**

There are no other reliability standards or Standard Authorization Requests (SARs), in progress or approved, that must be implemented before this standard can be implemented.

**Modified Standards**

PER-002-0 should be retired when PER-005-0 becomes effective.

PER-004-1 Requirement 2 should be retired when PER-005-1 Requirement 3 becomes effective.

PER-004-1 Requirements 3 and 4 should be retired when PER-005-1 Requirements 1 and 4 become effective.

The following tables summaries the mapping of the PER-004-1 requirements to PER-005-1 and other standard requirements:

<b>PER-004-1 Requirement</b>	<b>PER-005-1 and other Requirements</b>
R2. All Reliability Coordinator operating personnel shall each complete a minimum of five days per year of training and drills using realistic simulations of system emergencies, in addition to other training required to maintain qualified operating personnel.	R3. Each Reliability Coordinator, Balancing Authority and Transmission Operator entity shall provide each applicable System Operator with at least 32 hours annually of emergency operations and system restoration training.  PER-005-1 R3 includes PER-004-1 R2 and therefore PER-004-1 R2 should be removed. (Note that the five days per year of training has been clarified to mean 32 hours of training.)
R3. Reliability Coordinator operating personnel shall have a comprehensive understanding of the Reliability Coordinator Area and interactions with neighboring Reliability Coordinator Areas.	R1. Each Reliability Coordinator, Balancing Authority and Transmission Operator shall complete the five phases of a systematic approach to training (SAT) (which includes analysis, design, development, implementation, and evaluation) to establish a new or modify an existing training program(s) that addresses all Bulk Electric System company-specific reliability-related tasks.  R4. Each Reliability Coordinator, Balancing Authority and Transmission Operator shall verify the capabilities of each real-time System Operator to perform each assigned task on its list of company-specific reliability-related tasks. [Risk Factor: Medium] [Time Horizon: Long-term Planning]  The training program (PER-005-1 R1) and an assessment of each System Operator’s capabilities (PER-005-1 R3) duplicate PER-004-1 R3 and therefore PER-004-1 R3 should be removed.
R4. Reliability Coordinator operating personnel shall have an extensive understanding of the Balancing Authorities, Transmission Operators, and Generation Operators within the Reliability Coordinator Area, including the operating staff,	R1. Each Reliability Coordinator, Balancing Authority and Transmission Operator shall complete the five phases of a systematic approach to training (SAT) (which includes analysis, design, development, implementation, and evaluation) to establish a new or modify an existing training

PER-004-1 Requirement	PER-005-1 and other Requirements
operating practices and procedures, restoration priorities and objectives, outage plans, equipment capabilities, and operational restrictions.	<p>program(s) that addresses all Bulk Electric System company-specific reliability-related tasks.</p> <p>R4. Each Reliability Coordinator, Balancing Authority and Transmission Operator shall verify the capabilities of each real-time System Operator to perform each assigned task on its list of company-specific reliability-related tasks. [Risk Factor: Medium] [Time Horizon: Long-term Planning]</p> <p>The training program (PER-005-1 R1) and an assessment of each System Operator’s capabilities (PER-005-1 R3) duplicate PER-004-1 R4 and therefore PER-004-1 R4 should be removed.</p>

A redline version of PER-004-1 is posted with this Implementation Plan.

**Compliance with Standards**

Once this standard becomes effective, the responsible entities identified in the applicability section of the standard must comply with the requirements. These include:

- Reliability Coordinators,
- Balancing Authorities,
- Transmission Operators, and
- Reliability Coordinator, Balancing Authority and Transmission Operator delegates who can directly, or through communications, impact reliability by producing a real-time response from the Bulk Electric System.

**Proposed Effective Date**

Compliance with PER-005 shall be implemented over a three-year period, as follows:

- Requirement 3 in the standard shall become effective on the first day of first quarter after applicable regulatory approval (or the Reliability Standard otherwise becomes effective on the first day of first quarter after Board of Trustee adoption in jurisdictions where regulatory approval is not required).
- Requirement 2 in the standard shall become effective 18 months after the first day of the first quarter following regulatory approval (or the Reliability Standard otherwise becomes effective 18 months after the first day of the first quarter after Board of Trustees adoption in those jurisdictions where regulatory approval is not required).
- Requirement 1 and Requirement 4 shall become effective 36 months after the first day of the first quarter following regulatory approval (or the Reliability Standard otherwise becomes effective 36 months after the first day of the first quarter after Board of Trustees adoption in those jurisdictions where regulatory approval is not required).