

Implementation Plan — System Operator Training Standard

Background

The System Operator Training standard is designed to provide all system operators who work for the Reliability Coordinator, Balancing Authority, and Transmission Operator with training to provide the knowledge and skills needed to perform all assigned reliability-related tasks to a specified level of proficiency. The training provided under this standard includes training for entry-level system operators to bring those system operators to a minimum level of proficiency. Both refresher and continuing training are required for incumbent system operators. Refresher training is aimed at providing practice in performing tasks that are rated as having ‘high importance’ with respect to reliability, while also having a ‘low frequency’ of performance. Refresher training is also aimed at closing any gaps between actual and desired performance of individual system operators. Continuing training is aimed at providing incumbent system operators with new knowledge and skill to perform new tasks or use new tools.

The drafting team is developing several reference documents to assist responsible entities in complying with this standard. The reference documents include the following:

- A list of tasks commonly assigned to system operating positions for use in conducting a job task analysis
- Instructions on how to conduct a job task analysis, including guidance on how to establish performance criteria for tasks
- Instructions on how to conduct a training needs analysis suitable for use in determining what knowledge and skills are needed for an entry-level system operator to perform assigned tasks
- Instructions on how to conduct a training needs analysis suitable for use in determining mismatches between desired and actual performance of incumbent system operators
- References that provide guidance on developing training materials

Effective Date

The proposed standard will become effective when adopted by FERC, which is expected to be July 1, 2007. This assumes the standard is approved by its Ballot Pool in April 2007 and is adopted by the NERC Board of Trustees on May 2, 2007. Compliance with the requirements is phased in as follows¹:

	0 Yr.	1 Yr.	2Yr.
REQUIREMENTS	A 2-Year Phased Implementation Period		
Phase I – 1, 2, 3	R1, R2, R3 up to 12 Months		
Phase II – 4, 5, 6, 7	R4, R5, R6, R7 up to 18 Months		
Phase III – 8, 9, 10	R8, R9, R10 up to 24 Months		

Requirements 1–3	June 30, 2008
Requirements 4–7	December 31, 2008
Requirements 8–10	June 30, 2009

Note: These dates are relative to the final FERC approval date. The standard will go into effect beginning the first quarter after FERC approves the standard.

¹ Note that not all training needs to be implemented by the effective date. If there are no new System Operators, then there is no need to begin using the training designed for entry-level System Operators. However, annual refresher training and remedial training must be provided by the effective date for Requirement 4.

Impact on Existing Standards and Other Standards in Development

When this standard is implemented, the drafting team recommends retiring both PER-002-0 — Operating Personnel Training and PER-004-1 — Reliability Coordination — Staffing.

- PER-002-0 requires the Balancing Authority and Transmission Operator to have a training program, but has no requirements for the Reliability Coordinator to have a training program for its operating personnel. The requirements in PER-002-0 are not written as specifically or as objectively as the requirements in the proposed standard.

PER-004-1 has 5 requirements:

- The drafting team identified Requirement 1 as being duplicated by PER-003-0.
- Requirement 2 requires the Reliability Coordinator's operating personnel to have five days a year of emergency operations training and is duplicated by the proposed standard.
- Requirement 3 requires the Reliability Coordinator's operating personnel to have a comprehensive understanding of the Reliability Coordinator Area and interactions with neighboring Reliability Coordinator Areas. The job task analysis required as a foundation for the System Operator training program in the proposed standard should identify that this is reliability-related knowledge that a System Operator needs to perform several tasks — and therefore training and an assessment of the System Operator's knowledge in this area will be required under the proposed standard. In addition, one of the purposes of requirement R6.4.2. in this standard is to develop a Reliability Coordinator's knowledge of other entities in the Reliability Coordinator's area.
- Requirement 4 requires the Reliability Coordinator's operating personnel to have an extensive understanding of the Balancing Authorities, Transmission Operators, and Generation Operators within the Reliability Coordinator Area, including the operating staff, operating practices and procedures, restoration priorities and objectives, outage plans, equipment capabilities, and operational restrictions. The job task analysis required as a foundation for the System Operator training program in the proposed standard should identify that this is reliability-related knowledge that a System Operator needs to perform several tasks — and therefore training and an assessment of the System Operator's knowledge in this area will be required under the proposed standard. In addition, one of the purposes of requirement R6.4.2. in this standard is to develop a Reliability Coordinator's knowledge of other entities in the Reliability Coordinator's area.
- Requirement 5 requires the Reliability Coordinator's operating personnel to pay particular attention on SOLs and IROLs and inter-tie facility limits and requires the Reliability Coordinator to ensure that protocols are in place to allow Reliability Coordinator operating personnel to have the best available information at all times. There are other standards that require the Reliability Coordinator to operate within SOLs and IROLs and there are other standards that require the Reliability Coordinator to have monitoring capabilities and back up facilities. The Missing Measures and Compliance Elements Drafting Team determined that the language in this requirement was ambiguous and they declined to develop any measures or compliance elements to support the requirement.

Applicability

Every requirement in the proposed standard applies to all Reliability Coordinators, Balancing Authorities and Transmission Operators. The training described in the standard must be provided to all system operators, whether those system operators who work for the responsible entity are entity employees, contract employees or work as system operators for another entity under a delegation agreement. The intent is to ensure that all system operators who perform real-time operating functions for Reliability Coordinators, Balancing Authorities, and Transmission Operators have the knowledge and skills needed to perform all assigned reliability-related tasks to a measurable, acceptable degree of competency.