

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

PER Outreach Presentation

Patti Metro, NRECA

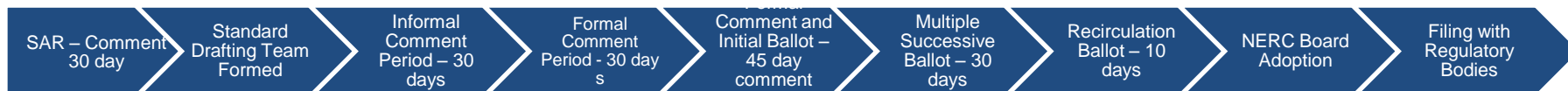
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RELIABILITY | ACCOUNTABILITY



- Evolving Standards Process
- Informal Development
- PER FERC directives
- PER Possible Solutions
- Suggested definition
- PER suggested applicability
- Upcoming and key dates
- PER Communication Plan
- PER ad hoc group contact information

Original Standards Process – multiple years



- February 2012: Board and MRC formed SPIG to address widespread frustration with Standards Development Process.
- May 2012: SPIG submitted a report with recommendations to improve both the timeliness and quality of the standards (NERC Board approved Process Manual changes, February 2013).
- August 2012: Commissioners urged the industry to focus on creating a more efficient standards development process; NERC CEO focused on revamping the standards process for more efficiency and quality.
- November 2012: NERC Board issued a resolution requesting the SPIG, MRC, SC, NERC staff and industry stakeholders to reform its standards development paradigm. Changes were integrated into 2013-15 Reliability Standards Development Plan and SC Strategic Plan.

Evolving Standards Process – one year



- Goals of the ad hoc group during informal development
 - Work with industry SME's to identify suggested modifications
 - Address FERC directives associated with each project
 - Develop SAR and first draft of pro forma standard **based on industry comments** and a pro forma RSAW
 - VRF and VSL
 - Implementation plan
- Other informal development projects
 - MOD A (MOD-001, -004, -008, -028, -029 and -030)
 - MOD B (MOD-010 – MOD-015)
 - MOD C (MOD-016 – MOD-021)
 - PER (PER-002 and PER-005)
 - VAR (VAR-001 and VAR-002)

- Five FERC Directives to the ERO

- Order 693

- *We direct the ERO to develop specific Requirements addressing the scope, content and duration appropriate for generator operator personnel.*
- *The Commission directs the ERO to include in PER-002-0, **personnel who**:*
 - *carry out outage coordination and assessments in accordance with IRO-004-1 and TOP-002-2*
 - *determine SOLs and IROLs or operating nomograms in accordance with IRO-005-1 and TOP-004-0.*
- *We direct the ERO to consider, through the Reliability Standards development process, whether personnel that perform functions having an impact on the reliability of the BES, should be included in mandatory training pursuant to PER-002-0.*
 - *Personnel responsible for ensuring that critical reliability applications of the EMS, such as state estimator, contingency analysis and alarm processing packages, are available, up-to-date in terms of system data and produce useable results.*

- FERC Order 742
 - *We direct NERC to consider the necessity of developing a similar implementation plan with respect to PER-005-1, Requirement R3.1. (simulation technology)*
 - *We direct NERC to develop a definition of “local transmission control center” in the standards development project for developing the training requirements for local transmission control center operator personnel.*

- New Standard
- Revised Standard
- Guideline – must be supported with technical justification as to why a standard will not be created

Glossary of Terms Definition:

System Operator: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.

*Control Center: One or more facilities hosting operating personnel that monitor and control the Bulk Electric System (BES) in real-time to perform the reliability tasks, including their associated data centers, of: 1) a Reliability Coordinator, 2) a Balancing Authority, 3) a Transmission Operator for transmission Facilities at two or more locations, or 4) a Generator Operator for generation Facilities at two or more locations.

Suggested Change:

System Operator: An individual at a Control Center* whose responsibility it is to monitor or control the Bulk Electric System in real time.

- PER Suggested Applicability
 - **Functional Entities:** For the purpose of the requirements contained herein, the following list of functional entities will be collectively referred to as “Responsible Entities.” For requirements in this standard where a specific functional entity or subset of functional entities are the applicable entity or entities, the functional entity or entities are specified explicitly.
 - **Reliability Coordinator**
 - **Balancing Authority**
 - **Transmission Operator**
 - **Transmission Owner** that has personnel exercising control over its portion of the Bulk Electric System that is under the supervision of the personnel of the registered Transmission Operator. This supervision may take the form of directing specific step-by-step instructions and at other times may take the form of the implementation of predefined operating procedures. (FERC Order 742 P. 64)
 - **Generator Operator**

- Further applicability details
 - Reliability Coordinator, Transmission Operator, Transmission Owner (as defined in Applicability Section) and Balancing Authority System Operators and personnel who are responsible for the real-time monitoring or controlling of the Bulk Electric System, conducting next-day reliability assessments or unplanned outage coordination. (FERC order 693 P.1372)
 - Reliability Coordinator, Transmission Operator, Transmission Owner (as defined in Applicability Section) and Balancing Authority operations support personnel who are responsible for ensuring that critical reliability applications of the EMS, such as state estimator, contingency analysis and alarm processing packages, are available, up-to-date in terms of system data and produce useable results that can also have an impact on the reliable operation of the Bulk Electric System. (FERC order 693 P.1373)
 - Generator Operator whose dispatchers (at a centrally-located generation dispatch center or at a dispatch center at the same site as a single generation plant) either: (i) receive direction and then develop specific dispatch instructions for plant operators under their control or (ii) determine the optimal dispatch of the generation from its portfolio of units. (FERC order 693 P.1363)

- Upcoming PER Webinars
 - April 4, 2013 – PER Industry Webinar
 - Q&A and feedback via verbal and chat
- Key Dates
 - May 2, 2013 – Posting of the SAR, pro forma standard and pro forma RSAW for 30 day comment
 - July 26, 2013 – Initial ballot posting: Standard and RSAW for 45 day comment
 - October 24, 2013 – Recirculation Ballot
 - November 7, 2013 – Board of Trustees Adoption
 - December 31, 2013 – File with FERC

Date	Event	Location
March 1	FRCC OC Conference Call	Conference Call
March 5-6	NERC OC, PC, and CIPC Meetings	Albuquerque, NM
March 5-6	SPP Compliance Workshop	Dallas, TX
March 7-8	NERC SC Meeting	Albuquerque, NM
March 11-13	FRCC Compliance Workshop	Tampa, FL
March 12	NATF	Conference Call
March 12-14	SERC Standing Committees	Charlotte, NC
March 13	PCGC and PS Conference Call	Conference Call
March 15	Informal Introduction to PER—005-1 Standard and process	Webinar
March 19	Trades	D.C.
March 19-20	FRCC OC	Conference Call
March 19-21	NERC Standards and Compliance Workshop	St. Louis, MO
March ?	Regions (Standards, Compliance, enforcement and regional presidents)	Conference call or Atlanta Meeting
March	Internal Controls Group – Transmission Forum	Conference Call
March 20-21	California Electric Training Advisory Committee	Sacramento, CA
March 21	MISO AFCWG	Conference Call
March 25	Standards Discussion Forum (NSRS)	Conference Call
March 26-28	WECC Standing Committees	Salt Lake City, UT
March 26-28	<i>Reliability First</i> Reliability Workshop	Columbus, OH
March 27-28	NERC Improving Human Performance Workshop	Atlanta, GA

Date	Event	Location
April 2	NERC Trades Meeting	Washington, DC
April 3	TRE Reliability Standards Meetings	TRE Office
April 3-4	WECC Operations Training Subcommittee (OTS)	Salt Lake City, UT
April 4	SCCG	Webinar
April 4	PER Industry Webinar	Webinar
April 10-11	NPCC RSC	New York City, NY
April 17	ERAG SC Spring Meeting	Charlotte, NC
April 18	MISO AFCWG	Conference Call

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Questions and Answers