



# NERC and Regional Coordination Update

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Reliability Standards and Compliance  
Subcommittee

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## NERC Standards Under Development

Standards	Project	Activity	Due Date
TPL-007-1	<p><b>Project 2013-03 Geomagnetic Disturbance Mitigation</b></p> <p>To develop reliability standards to mitigate the risk of instability, uncontrolled separation, and Cascading as a result of GMDs. This is a two-stage project.</p> <p><b>Stage 1:</b> standards required applicable registered entities to develop and implement Operating Procedures that can mitigate effects of GMD events (EOP-010-1)</p> <p><b>Stage 2:</b> standards will require applicable entities to conduct initial and on-going assessments of potential impact of benchmark GMD events on their respective systems as directed in Order 779 (planning standards).</p> <p>SDT noticed an error in Figure 1 of the Screening Criterion for Transformer Thermal Impact Assessment White Paper. This error resulted in incorrect plotting of simulated power transformer peak hot-spot heating from the Benchmark GMD Event. SDT corrected this error and made related revisions to other white papers.</p> <p><b>Following revised white papers are posted for comment:</b></p> <ol style="list-style-type: none"><li>1. Benchmark GMD Event White Paper</li><li>2. Transformer Thermal Impact Assessment White Paper</li><li>3. Thermal Screening Criterion White Paper</li></ol>	Comment	6/13/16



# NERC Standards Under Development

Standards	Project	Activity	Due Date
<b>SAR for TPL-001-5</b>	<b>Project 2015-10 Single Points of Failure TPL-001</b> The SPCS and the SAMS conducted an assessment of protection system single points of failure in response to FERC Order No. 754, including analysis of data from the NERC Section 1600 Request for Data for Information. The assessment confirms the existence of a reliability risk associated with single points of failure in protection systems that warrants further action.  Additionally, the two directives from FERC Order No. 786 (p. 40 and p. 89) and updates to the MOD reference in Requirement R1, Measure M1 and the Violation Severity Levels sections have been added to the scope of the project.	<b>Comments</b>	<b>6/24/16</b>



## NERC Standards Under Development

Standards	Project	Activity	Due Date
ROP Appendices 2, 5A and 5B	<p><b>Proposed Reserve Sharing Group Revisions to NERC Rules of Procedure and Request for Comments:</b></p> <p>NERC is proposing revisions to its Rules of Procedure Appendices 2, 5A, and 5B to incorporate “Frequency Response Sharing Group” and “Regulation Reserve Sharing Group” consistent with those terms as defined in the Glossary of Terms Used in NERC Reliability Standards and used in Reliability Standards BAL-001-2 and BAL-003-1.1 as approved by FERC in Order Nos. 794 and 810. Inclusion of these terms within the NERC Rules of Procedure will align these terms with the NERC Standards Glossary and support implementation of Reliability Standards BAL-001-2 and BAL-003-1.1. NERC proposes to request that these revisions become effective at the end of October. NERC intends to submit these changes to the NERC Board of Trustees for approval at its August 11, 2016 meeting.</p>	Comments	6/23/16



## NERC Standards Under Development

Standards	Project	Activity	Due Date
ROP Section 500, 600 and 1000 Appendices 2 and 8	<p><b>Proposed Reserve Sharing Group Revisions to NERC Rules of Procedure and Request for Comments:</b></p> <p>NERC is proposing revisions to Section 600 (Personnel Certification) of its Rules of Procedure (ROP) to clarify various provisions of Section 600, to streamline certain processes, and to reflect current practices.</p> <p>NERC is also proposing revisions to Section 500 (Organization Registration and Certification), Section 1000 (Situation Awareness and Infrastructure Security), Appendix 2 (Definitions Used in the Rules of Procedure), and Appendix 8 (NERC Blackout and Disturbance Response Procedures) of the NERC ROP to include the defined term “System Operator” and to implement the term throughout the ROP. Inclusion of the term “System Operator” within the NERC Rules of Procedure will more closely align the NERC ROP with the Glossary of Terms Used in NERC Reliability Standards as approved by FERC.</p> <p>NERC proposes to request that these revisions become effective immediately after filing with FERC. NERC intends to submit these changes to the NERC Board of Trustees for approval at its August 11, 2016 meeting.</p>	Comments	6/30/16



## NERC Standards Subject to Future Enforcement

### ➤ July 1, 2016

- BAL-001-2 - Real Power Balancing Control Performance
- CIP-002-5.1- Cyber Security – BES Cyber System Categorization;
- CIP-005-5 - Cyber Security – Electronic Security Perimeter(s);
- CIP-003-6 - Cyber Security – Security Management Controls;
- CIP-004-6 - Cyber Security – Personnel & Training;
- CIP-006-6 - Cyber Security – Physical Security of BES Cyber Systems;
- CIP-007-6 - Cyber Security – System Security Management;
- CIP-008-5 - Cyber Security – Incident Reporting and Response Planning;
- CIP-009-6 - Cyber Security – Recovery Plans for BES Cyber Systems;
- CIP-010-2 - Cyber Security – Configuration Change Management and Vulnerability Assessments;
- CIP-011-2 - Cyber Security – Information Protection
- COM-002-4 - Operating Personnel Communications Protocols
- MOD-025-2 - Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive Power Capability



## NERC Standards Subject to Future Enforcement

- July 1, 2016
  - MOD-031-1 - Demand and Energy Data
  - PER-005-2 - Operations Personnel Training
  - PRC-002-2 - Disturbance Monitoring and Reporting Requirements
  - PRC-004-4(i) - Protection System Misoperation Identification and Correction;
  - PRC-019-2 - Coord of Gen Unit or Plant Capabilities, Voltage Regulating Controls, and Protection
  - PRC-024-2 - Generator Frequency and Voltage Protective Relay Settings
- October 1, 2016
  - FAC-003-4 - Transmission Vegetation Management
  - MOD-031-2 - Demand and Energy Data





## NERC Standards Subject to Future Enforcement

- January 1, 2017
  - IRO-010-2 – Reliability Coordinator Data Specification and Collection (R1 and R2)
  - TOP-003-3 – Operational Reliability Data (All Requirements but R5)
- April 1, 2017
  - EOP-010-1 – Geomagnetic Disturbance Operations (Requirement 2)
  - EOP-011-1 – Emergency Operations
  - IRO-001-4 – Reliability Coordination – Responsibilities
  - IRO-002-4 - Reliability Coordination — Monitoring and Analysis
  - IRO-008-2 – Reliability Coordinator Operational Analyses and Real-time Assessments
  - IRO-010-2 – Reliability Coordinator Data Specification and Collection (R3)
  - IRO-014-3 — Coordination Among Reliability Coordinators
  - IRO-017-1 — Outage Coordination
  - PRC-010-1 – Undervoltage Load Shedding
  - TOP-001-3 – Transmission Operations
  - TOP-002-4 – Operations Planning
  - TOP-003-3 – Operational Reliability Data (R5)





## NERC Standards Subject to Future Enforcement

- April 2, 2017
  - PRC-004-5(i) - Protection System Misoperation Identification and Correction
  - PRC-010-2 – Undervoltage Load Shedding
- July 1, 2017
  - MOD-033-1 - Steady-State and Dynamic System Model Validation
- January 1, 2018
  - PRC-026-1 – Relay Performance During Stable Power Swings (R1)
- January 1, 2020
  - PRC-026-1 – Relay Performance During Stable Power Swings (R2-R4)