NERC and Regional Coordination Update

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NERC and Regional Coordination
SOS – September 30, 2015
### Phase 3 of Protection Systems: Remedial Action Schemes (RAS)

Phase 3 is intended to address all aspects of RAS and Special Protection Systems (SPS) contained in the RAS/SPS-related Reliability Standards. In FERC Order No. 693, the Commission identified PRC-012-1, PRC-013-1, and PRC-014-1 as “fill-in-the-blank” standards.

The Phase 3 SDT will correct the applicability of the fill-in-the-blank standards by assigning the requirement responsibilities to the specific users, owners, and operators of the Bulk-Power System; and will revise the RAS/SPS-related standards that address the:

- planning, coordination, and design of RAS/SPS,
- review, assessment, and documentation of RAS/SPS,
- analysis of RAS/SPS operation(s) and/or failure(s) to operate,
- testing of RAS/SPS, and maintenance of any non-protection system components used.

<table>
<thead>
<tr>
<th>Standards</th>
<th>Project</th>
<th>Activity</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>PRC-012-2</td>
<td>Project 2010-05.3 Phase 3 of Protection Systems: Remedial Action Schemes (RAS)</td>
<td>Initial Ballot</td>
<td>9/25/15 – 10/5/15</td>
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<td>Comments Close</td>
<td>10/5/15</td>
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### Overview

**Purpose:** To establish requirements for Real-time monitoring and analysis capabilities used by System Operators for reliable System operations.

**Drivers for the Project:**
1. Lack of situational awareness as identified in 2003 Blackout Report
3. Weaknesses in Real-time situational awareness identified in 2011 Southwest Outage Report
4. FERC Order 693 directives for further improving TOP and IRO standards

First drafts of two new standards, IRO-018-1 – Reliability Coordinator Real-time Monitoring and Analysis Capabilities, applicable to RCs, and TOP-010-1 – Real-time Reliability Monitoring and Analysis Capabilities, applicable to TOPs and BAs, posted for comment.

Standard Authorization Request (SAR) and SAR Justification White Paper also posted for reference.

### Table: NERC Standards Under Development

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<tr>
<th>Standards</th>
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<th>Activity</th>
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<tbody>
<tr>
<td>IRO-018-1</td>
<td>Project 2009-02: Real-time Reliability Monitoring and Analysis Capabilities</td>
<td>Initial Ballot</td>
<td>10/30/15-11/09/15</td>
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**Initial Ballot Comments Close:** 11/09/15
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<th>Standards</th>
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<tr>
<td>BAL-004-0 to be</td>
<td><strong>Project 2010-14.2.2: Phase 2 of Balancing Authority Reliability-based</strong></td>
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<td>retired</td>
<td><strong>Controls (BARC 2) – BAL-004-2</strong></td>
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<td></td>
<td><strong>Purpose:</strong> BARC 2 Periodic Review Team (PRT) was established to conduct periodic reviews on BAL standards. As part of periodic reviews, BARC 2 PRT assessed whether BAL-004-0 should be affirmed, revised, or retired.</td>
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<td>BARC 2 PRT’s extensive review determined that BAL-004-0 should be retired and that manual Time Error Correction (TEC) should be eliminated as a continent-wide NERC requirement.</td>
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<td>The SDT reviewed BARC 2 PRT’s findings and posted a survey for comment August 12-25, 2015 to gain industry’s feedback on manual TEC elimination. Survey responses indicated support of manual TEC retirement.</td>
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**NERC Standards Under Development**

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<td>COM-001-3</td>
<td><strong>Project 2015-07: Internal Communications Capabilities</strong></td>
<td>Initial Ballot</td>
<td>11/6/15-11/6/15</td>
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<tr>
<td>COM-001-3</td>
<td><strong>Project 2015-07: Internal Communications Capabilities</strong></td>
<td>Comments Close</td>
<td>11/16/15</td>
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**Purpose:** Address directive from FERC Order No. 808 to modify COM-001-2 or develop a new standard to address “internal communications capabilities that could involve the issuance or receipt of Operating Instructions or other communications that could have an impact on reliability.”

First draft of COM-001-3 posted for comment. The SDT revised COM-001-2 to address FERC directives mentioned above. Added two requirements, R12, applicable to RC, BA, TOP, and GOP, and R13, applicable to DP.
NERC Standards Subject to Future Enforcement

- **October 1, 2015**
  - CIP-014-1 - Physical Security
  - COM-001-2 - Communications
  - PRC-006-2 - Automatic Underfrequency Load Shedding

- **January 1, 2016**
  - FAC-001-2 - Facility Interconnection Requirements
  - FAC-002-2 - Facility Interconnection Studies
  - NUC-001-3 - Nuclear Plant Interface Coordination

- **April 1, 2016**
  - PRC-005-3 - Protection System and Automatic Reclosing Maintenance
  - PRC-005-3(i) - Protection System and Automatic Reclosing Maintenance (w/ disp gen)
NERC Standards Subject to Future Enforcement

- **July 1, 2016**
  - BAL-001-2 - Real Power Balancing Control Performance
  - 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
  - MOD-031-1 - Demand and Energy Data
  - PER-005-2 - Operations Personnel Training
  - PRC-004-4 – Protection System Misoperation Identification and Correction;
  - PRC-019-1 - Coord of Gen Unit or Plant Capabilities, Voltage Regulating Controls, and Protection
  - PRC-019-2 – Coord of Gen Unit or Plant Capabilities, Voltage Regulating Controls, and Protection
  - PRC-024-1 - Generator Frequency and Voltage Protective Relay Settings
  - PRC-024-2 – Generator Frequency and Voltage Protective Relay Settings

- **July 1, 2017**
  - MOD-033-1 - Steady-State and Dynamic System Model Validation