NERC and Regional Coordination Update

Mark Kuras, Sr. Lead Engineer
NERC and Regional Coordination
PC – November 5, 2015
### Standards

<table>
<thead>
<tr>
<th>Standards</th>
<th>Project</th>
<th>Activity</th>
<th>Due Date</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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<tr>
<td>TOP-010-1</td>
<td>Purpose: To establish requirements for Real-time monitoring and analysis capabilities used by System Operators for reliable System operations.</td>
<td>Comments Close</td>
<td>11/09/15</td>
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<td>Drivers for the Project:</td>
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<td>1. Lack of situational awareness as identified in 2003 Blackout Report</td>
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<td>3. Weaknesses in Real-time situational awareness identified in 2011 Southwest Outage Report</td>
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<td>4. FERC Order 693 directives for further improving TOP and IRO standards</td>
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<td>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.</td>
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<td>Standard Authorization Request (SAR) and SAR Justification White Paper also posted for reference</td>
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**Standards** | Project | Activity | Due Date
--- | --- | --- | ---
BAL-004-0 to be retired | **Project 2010-14.2.2: Phase 2 of Balancing Authority Reliability-based Controls (BARC 2) – BAL-004-2** | Initial Ballot | 11/3/15-11/12/15

**Purpose:** 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.

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.

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.

| Comments Close | 11/12/15 |
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.
### Project 2077-06.2: Phase 2 of System Protection Coordination

**Purpose:** The project originated in 2007 to address directives from FERC Order 693 and other issues identified by System Protection and Control Task Force pertaining to PRC-001.

In conjunction with Phase 1, Phase 2 proposes to retire PRC-001-1.1(ii) completely. Draft 2 of TOP-009-1 posted for comment.

Phase 2 of the project proposes to retire R1, R2, R5, and R6 of PRC-001-1.1(ii) because the reliability objectives are addressed by other TOP/IRO standards (IRO-001-4, IRO-005-4, IRO-008-2, IRO-010-2, IRO-017-1, TOP-001-3, and TOP-003-3) that were developed since Order 693.

Phase 1 of the project developed PRC-027-1 to address the issues mentioned above. PRC-027-1 incorporates reliability objectives of R3 and R4 from PRC-001-1.1(ii).
NERC Standards Subject to Future Enforcement

- **January 1, 2016**
  - FAC-001-2 - Facility Interconnection Requirements
  - FAC-002-2 - Facility Interconnection Studies
  - NUC-001-3 - Nuclear Plant Interface Coordination
  - PRC-005-4 – Protection System, Automatic Reclosing, and Sudden Pressure Relaying Maintenance

- **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-002-2 - Disturbance Monitoring and Reporting Requirements
  - 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
  - PRC-002-2 - Disturbance Monitoring and Reporting Requirements

- **July 1, 2017**
  - MOD-033-1 - Steady-State and Dynamic System Model Validation
• ReliabilityFirst (RF) has indicated an interest in attending some of PJM’s Committee meetings
• No details yet, stay tuned