NERC and Regional Coordination Update

Preston Walker
Planning Committee
August 10, 2017
Standards | Project | Activity | Due Date
--- | --- | --- | ---
Proposed Revisions to the NERC Rules of Procedure Appendix 3D |  | Comments | 8/10/2017

**Applicability:**
Registered Ballot Body

**Purpose:**
- Appendix 3D details the Registered Ballot Body Criteria.
- The Registered Ballot Body is the aggregation of all entities or individuals that qualify for one of the Segments approved by the Board of Trustees and are registered with NERC as potential ballot participants in the voting on proposed Reliability Standards.
- At the request of stakeholders, the purpose of these revisions is to help ensure that the votes of the Independent System Operators and Regional Transmission Organizations are appropriately represented in the Registered Ballot Body voting structure.

**PJM Position:**
PJM agrees with the proposed changes and will monitor SRC activity.
### Standards Project Activity Due Date

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<th>Standards</th>
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</thead>
<tbody>
<tr>
<td>TPL-007-2</td>
<td>Project 2013-03 Geomagnetic Disturbance Mitigation TPL-007-2</td>
<td>Comments Ballots</td>
<td>8/11/2017</td>
</tr>
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**Applicability:**
PC, TP, TO, GO

**Purpose:**
Revisions include:

- Modify the benchmark GMD event definition used for GMD Vulnerability Assessments
- Make related modifications to requirements pertaining to transformer thermal impact assessments
- Require collection of GMD-related data. NERC is directed to make data available; and
- Require deadlines for Corrective Action Plans (CAPs) and GMD mitigating actions.

**PJM Position:**
PJM agrees with the proposed changes and will monitor SRC activity.
Integrating Inverter-based Resources into Weak Power Systems

**Purpose:**
A comment period is open for the draft Reliability Guideline on Integrating Inverter-based Resources into Weak Power Systems. This guideline provides the industry with background and useful reference information pertaining to the topics of:

- identifying weak grid conditions and
- potential issues that may arise from weak grids when connecting or operating inverter-based resources.

The goal is to proactively provide the industry with information for their consideration as they face this emerging issue and increasing penetrations of inverter-based resources.

**PJM Position:**
Most relaying on the distribution system is incompatible with large amounts of generation. Reference the need for distribution protection coordination.

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<tr>
<td>Integrating Inverter-based Resources into Weak Power Systems</td>
<td>Comments</td>
<td>8/25/2017</td>
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<td>Standards</td>
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<tr>
<td>Draft Reliability Guideline: Area Control Error Diversity Interchange Process V2</td>
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<td>Comments</td>
<td>8/31/2017</td>
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**Applicability:**
- RC, TOP, BA

**Purpose:**
This guideline is intended to provide recommended practices related to the usage of Area Control Error Diversity Interchange (ADI). ADI is a process in which participating BAs exchange information related to their raw ACE values in order to develop ADI adjustment values to their ACE. Fundamentally, ADI is simply exchanging a real-time portion of one BA's ACE for an equal but opposite portion of another BA's ACE, thereby reducing the ACE values of both BAs.

**PJM Position:**
- Guideline is directed towards the Western Interconnection
- Language needs to align with NERC Glossary of Terms
### Standards

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<tr>
<td>PRC-025-1</td>
<td>Project 2016-04 Modifications to PRC-025-2 – Generator Relay Loadability</td>
<td>Comments</td>
<td>9/07/2017</td>
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</table>

**Applicability:**
- TO, GO, DP

**Purpose:**
Revised attachments to:

1. Prevent non-compliance for conditions where the GO may be prevented from achieving the margin specified for dispersed power producing resources.
2. Prevent a lowering of reliability and potential non-compliance where the GO might apply a non-standard relay application and undermine the goal of the standard.
3. Prevent a lowering of reliability where the GO might only apply part of the Table 1 application(s) thereby misapplying the loadability margins to relays.
4. Prevent a lowering of dependability of protective relays directional toward the Transmission system at generating facilities that are remote to the network.
NERC Standards Subject to Future Enforcement

- **October 1, 2017**
  - COM-001-3 – Communications
    - M-01 Revisions (PJM Internal, and TO Internal Communications)
    - IRO-002-5 – Reliability Coordination – Monitoring and Analysis

- **January 1, 2018**
  - PRC-026-1 – Relay Performance During Stable Power Swings (R1)

- **April 1, 2018**
  - IRO-018-1(i) – Reliability Coordinator Real-time Reliability Monitoring and Analysis Capabilities
  - TOP-010-1 – Real-time Reliability Monitoring and Analysis Capabilities
NERC Standards Subject to Future Enforcement

- **July 1, 2018**
  - MOD-026-1 – Verification of Models and Data for Generator Excitation Control System or Plant Volt/VAR Control Functions (R2, R2.1 – R2.1.6)
  - MOD-027-1 – Verification of Models and Data for Turbine/Governor and Load Control or Active Power/Frequency Control Functions (R2, R2.1 – R2.1.5)
  - TOP-001-4 – Transmission Operations
  - TPL-007-1 – Transmission System Planned Performance for Geomagnetic Disturbance Events (R2)

- **January 1, 2019**
  - TPL-007-1 – Transmission System Planned Performance for Geomagnetic Disturbance Events (R5)

- **January 1, 2021**
  - PRC-026-1 – Relay Performance During Stable Power Swings (R2 - R4)
  - TPL-007-1 – Transmission System Planned Performance for Geomagnetic Disturbance Events (R6)

- **January 1, 2022**
  - TPL-007-1 – Transmission System Planned Performance for Geomagnetic Disturbance Events (R3, R4, R7)

NERC Standards Subject to Future Enforcement
Questions?

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