

## Standard Development Timeline

This section is maintained by the drafting team during the development of the standard and will be removed when the standard is adopted by the NERC Board of Trustees (Board).

### Description of Current Draft

| Completed Actions   | Date                |
|---|---------------------|
| Standards Committee approved Standard Authorization Request (SAR) for posting | 08/19/15            |
| SAR posted for comment  | 08/20/15 – 09/21/15 |
| 45-day formal comment period with ballot                                      | 09/29/17 – 11/14/17 |

| Anticipated Actions                                 | Date                       |
|---|----------------------------|
| 45-day formal comment period with additional ballot | August 2018 – October 2018 |
| 10-day final ballot                                 | October 2018               |
| NERC Board adoption                                 | November 2018              |

## A. Introduction

1. **Title:** Coordination of Planning Assessments with the Reliability Coordinator’s SOL Methodology
2. **Number:** FAC-015-1
3. **Purpose:** To ensure the Facility Ratings, System steady-state voltage limits, and stability criteria used in Planning Assessments are coordinated with the Reliability Coordinator’s System Operating Limits (SOL) Methodology.
4. **Applicability:**
  - 4.1. **Functional Entities:**
    - 4.1.1. Planning Coordinator
    - 4.1.2. Transmission Planner
5. **Effective Date:** See Implementation Plan for [Project 2015-09](#).

## B. Requirements and Measures

- R1.** Each Planning Coordinator and each of its Transmission Planners, when developing its steady-state modeling data requirements, shall implement a process to ensure that Facility Ratings used in its Planning Assessment of the Near-Term Transmission Planning Horizon are equally limiting or more limiting than the owner-provided Facility Ratings used in operations per the Reliability Coordinator’s SOL Methodology. The process may allow the use of less limiting Facility Ratings if: *[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*
- The Facility has higher Facility Ratings as a result of a planned upgrade, addition, or Corrective Action Plan;
  - Facility Rating differences are due to variations in ambient temperature assumptions;
  - The Planning Coordinator provided a technical rationale for using a less limiting Facility Rating to each affected Transmission Planner and Reliability Coordinator; or
  - The Transmission Planner provided a technical rationale for using a less limiting Facility Rating to each affected Planning Coordinator and Reliability Coordinator.
- M1.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation demonstrating the Planning Coordinator implemented its process in accordance with Requirement R1.
- R2.** Each Planning Coordinator and each of its Transmission Planners shall implement a process to ensure that System steady-state voltage limits used in its Planning

Assessment of the Near-Term Transmission Planning Horizon are equally limiting or more limiting than the System Voltage Limits used in operations per the Reliability Coordinator’s SOL Methodology. *[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*

- The Planning Coordinator may use less limiting System Voltage Limits if it provides a technical rationale for using less limiting System Voltage Limits to each affected Transmission Planner and Reliability Coordinator.
  - The Transmission Planner may use less limiting System Voltage Limits if it provides a technical rationale for using less limiting System Voltage Limits to each affected Planning Coordinator and Reliability Coordinator.
- M2.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation demonstrating the Planning Coordinator implemented its process in accordance with Requirement R2.
- R3.** Each Planning Coordinator and each of its Transmission Planners shall implement a process to ensure the stability performance criteria used in its Planning Assessment of the Near-Term Transmission Planning Horizon are equally limiting or more limiting than the stability performance criteria used in operations per the Reliability Coordinator’s SOL Methodology. *[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*
- The Planning Coordinator may use less limiting stability performance criteria if it provides a technical rationale for using less limiting stability performance criteria to each affected Transmission Planner and Reliability Coordinator.
  - The Transmission Planner may use less limiting stability performance criteria if it provides a technical rationale for using less limiting stability performance criteria to each affected Planning Coordinator and Reliability Coordinator.
- M3.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation demonstrating the Planning Coordinator implemented its process in accordance with Requirement R3.
- R4.** Each Planning Coordinator and each Transmission Planner shall communicate any instability, Cascading or uncontrolled separation identified in either its Planning Assessment of the Near-Term Transmission Planning Horizon or its Transfer Capability assessment (Planning Coordinator only) to each impacted Reliability Coordinator, Transmission Operator, Transmission Owner, and Generation Owner. This communication shall include: *[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*
- 4.1** The type of instability identified (e.g., voltage collapse, angular instability, transient voltage dip criteria violation);
  - 4.2** The associated stability criteria used as part of determining the instability;

- 4.3 The associated Contingency(ies) and any Facilities critical to the instability, Cascading or uncontrolled separation;
  - 4.4 A description of the studied System conditions when the instability, Cascading or uncontrolled separation was identified;
  - 4.5 Any Remedial Action Scheme action, undervoltage load shedding (UVLS) action, underfrequency load shedding (UFLS) action, interruption of Firm Transmission Service, or Non-Consequential Load Loss required to address the instability, Cascading or uncontrolled separation; and
  - 4.6 Any Corrective Action Plan associated with the instability, Cascading or uncontrolled separation.
- M4. Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation demonstrating the Planning Coordinator and Transmission Planner communicated the information in accordance with Requirement R4.

## C. Compliance

### 1. Compliance Monitoring Process

#### 1.1. Compliance Enforcement Authority:

“Compliance Enforcement Authority” means NERC or the Regional Entity, or any entity as otherwise designated by an Applicable Governmental Authority, in their respective roles of monitoring and/or enforcing compliance with mandatory and enforceable Reliability Standards in their respective jurisdictions.

#### 1.2. Evidence Retention:

The following evidence retention period(s) identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full-time period since the last audit.

The applicable entity shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation.

- The Planning Coordinator and Transmission Planner shall keep evidence for Requirements R1 through R4 for the most current year plus the previous three years.

#### 1.3. Compliance Monitoring and Enforcement Program

As defined in the NERC Rules of Procedure, “Compliance Monitoring and Enforcement Program” refers to the identification of the processes that will be used to evaluate data or information for the purpose of assessing performance or outcomes with the associated Reliability Standard.



## Violation Severity Levels

| R #        | Violation Severity Levels |              |  |  |
|------------|---------------------------|--------------|--|--|
|            | Lower VSL                 | Moderate VSL | High VSL   | Severe VSL   |
| <b>R1.</b> | N/A                       | N/A          | The Planning Coordinator or a Transmission Planner used less limiting Facility Ratings than the Facility Ratings established in accordance with its Reliability Coordinator’s SOL Methodology, but failed to identify the exclusion criteria allowing the use of less limiting Facility Ratings. | The Planning Coordinator or a Transmission Planner failed to implement a process to ensure that Facility Ratings used in Planning Assessment are equally limiting or more limiting than those established in its Reliability Coordinator’s SOL Methodology.  |
| <b>R2.</b> | N/A                       | N/A          | The Planning Coordinator or a Transmission Planner used less limiting System steady-state voltage limits than the System Voltage Limits established in accordance with its Reliability Coordinator’s SOL Methodology, but did not provide its technical rationale.                               | The Planning Coordinator or a Transmission Planner failed to implement a process to ensure that System steady-state voltage limits used in Planning Assessments are equally limiting or more limiting than the System Voltage Limits established in accordance with its Reliability Coordinator’s SOL Methodology. |

|                   |  |  |   |   |
|-------------------|--|--|---|---|
| <p><b>R3.</b></p> | <p>N/A</p>   | <p>N/A</p>   | <p>The Planning Coordinator or a Transmission Planner used less limiting stability performance criteria than the stability performance criteria established in its Reliability Coordinator’s SOL Methodology, but did not provide its technical rationale.</p>  | <p>The Planning Coordinator or a Transmission Planner failed to implement a process to ensure that stability performance criteria used in Planning Assessments are equally limiting or more limiting than the stability performance criteria established in the Reliability Coordinator’s SOL Methodology.</p>  |
| <p><b>R4.</b></p> | <p>The Planning Coordinator or Transmission Planner communicated the identified instability, Cascading, or uncontrolled separation to each impacted Reliability Coordinator, Transmission Operator, Transmission Owner and Generator Owner, but the communication did not contain one of the elements listed in Requirement R4, Parts 4.1 – 4.6.</p> | <p>The Planning Coordinator or Transmission Planner communicated the identified instability, Cascading, or uncontrolled separation to each impacted Reliability Coordinator, Transmission Operator, Transmission Owner and Generator Owner, but the communication did not contain two of the elements listed in Requirement R4, Parts 4.1 – 4.6.</p> | <p>The Planning Coordinator or Transmission Planner communicated the identified instability, Cascading, or uncontrolled separation to each impacted Reliability Coordinator, Transmission Operator, Transmission Owner and Generator Owner, but the communication did not contain three elements listed in Requirement R4, Parts 4.1 – 4.6.</p> | <p>The Planning Coordinator or Transmission Planner communicated the identified instability, Cascading, or uncontrolled separation to each impacted Reliability Coordinator, Transmission Operator, Transmission Owner and Generator Owner, but the communication did not contain four or more of the elements listed in Requirement R4, Parts 4.1 – 4.6.</p> <p>OR</p> |

|  |  |  |  |   |
|--|--|--|--|---|
|  |  |  |  | The Planning Coordinator failed to communicate any identified instability, Cascading, or uncontrolled separation to each impacted Reliability Coordinator, Transmission Operator, Transmission Owner and Generator Owner. |
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## **D. Regional Variances**

None

## **E. Interpretations**

None

## **F. Associated Documents**

Implementation Plan

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## Version History

| Version | Date | Action                                    | Change Tracking |
|---------|------|---|-----------------|
| 1       |      | Project 2015-09 SOL – Adopt new standard. | New             |