

# Implementation Plan

## Project 2010-13.3 – Relay Loadability: Stable Power Swings

### Requested Approvals

PRC-026-1 – Relay Performance During Stable Power Swings

### Requested Retirements

None.

### Prerequisite Approvals

None.

### General Considerations

There are a number of factors that influence the determination of an implementation period for the new proposed standard. The following factors may be specific to one or more of the applicable entities listed below.

1. The effort and resources for all applicable entities to develop or modify internal processes and/or procedures.
2. The effort and resources for the Planning Coordinator to ~~identify the~~begin identifying Element(s) according to the ~~criteria~~criteria in Requirement R1: based on existing information (e.g., the most recent Planning Assessment).
3. The notification of Elements in Requirement R1 is based on the Planning Coordinator's existing studies (i.e., annual Planning Assessments) and there will be minimal additional effort to identify Elements according to the criteria.
3. ~~The need for the Generator Owner or Transmission Owner to plan for and secure resources (e.g., availability of consultants, if needed) to evaluate each load responsive protective relay's response to a stable power swing for identified Elements.~~
4. ~~The~~address the initial influx of Elements from the Planning Coordinator during the implementation period of ~~time for a Generator Owner or Transmission Owner to develop a Corrective Action Plan to modify its Protection System.~~<sup>4</sup>Requirement R2.

<sup>4</sup> The period of time that may be required for a Generator Owner or Transmission Owner to take an Element outage, if necessary, to modify the Protection System is driven through the Corrective Action Plan (CAP) and is independent of the standard's implementation period. The CAP includes its own timetable which is at the discretion of the entity.

**Applicable Entities**

Generator Owner  
 Planning Coordinator  
 Transmission Owner

**Effective ~~Date~~ Dates****Requirement ~~Requirements R1-R3, R5, and R6~~****R1**

First day of the first full calendar year that is 12 months after the date that the standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first full calendar year that is 12 months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

**Requirement ~~Requirements R2, R3, and R4~~**

First day of the first full calendar year that is 36 months after the date that the standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first full calendar year that is 36 months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

**Notifications Prior to the Effective Date of R4R2**

During the implementation of the standard, notifications are likely to occur prior to Requirement R4R2 becoming effective. Where notification ~~under R1 or identification of Elements~~ under Requirement R2 ~~R1 or becoming aware of an Element tripping due to a stable~~ or ~~R3 occurs~~ unstable power swing prior to the Effective Date of Requirement R4R2, the 12 month time period ~~to evaluate if an Element's load-responsive protective relays meet the criteria in PRC-026-1 – Attachment B~~ in Requirement R4R2 will begin, as expected, from the Effective Date of Requirement R4R2. Thereafter, entities will follow the 12 month time period in ~~R4~~ accordance with Requirement R2. The intention of the additional time for R4R2 to become effective is to handle the initial influx of notifications and identifications.

**Justification**

The implementation plan is based on the general considerations above and provides sufficient time for the Generator Owner, Planning Coordinator, and Transmission Owner to begin becoming compliant with the standard. The Effective date is constructed such that once the standard is adopted or approved it would become effective ~~in on the first day of~~ the first whole calendar year ~~after approvals~~ that is 12 months for ~~Requirements R1-R3, R5, and R6~~ Requirement R1 and 36 months for ~~Requirement~~ Requirements R2, R3, and R4 ~~after adoption or approval~~.

**Requirement R1** – The Planning Coordinator will have at least one full calendar year to prepare itself to identify any generator, transformer, and transmission line BES Elements that meet the criteria and notify the respective Generator Owner and Transmission Owner of ~~any~~ identified Elements, if any, within the allotted timeframe.

~~**Requirement R2** – The Transmission Owner will have at least one year to prepare itself with identifying any Element that trips due to a stable or unstable power swing during an actual system Disturbance due to the operation of its load-responsive protective relays, or any Element that forms the boundary of an island during an actual system Disturbance due to the operation of its protective relays. This includes providing the applicable notifications to the Planning Coordinator within the allotted timeframe.~~

~~**Requirement R3** – The Generator Owner will have at least one year to prepare itself with identifying any Element that trips due to a stable or unstable power swing during an actual system Disturbance due to the operation of its load-responsive protective relays. This includes providing the applicable notifications to the Planning Coordinator within the allotted timeframe.~~

~~**Requirement R4** – The Generator Owner and Transmission Owner will have at least three years to develop internal processes and procedures for evaluating 36 calendar months to determine if~~ its load-responsive protective relays for an identified Element pursuant to ~~Requirements~~ Requirement R1, R2, and R3 meet the Attachment B criteria. Also, both entities are provided an implementation that will allow the entity to conduct initial evaluations of its load-responsive protective relays for an identified Element during the first 36 calendar months of approval.

~~**Requirement R5**~~ **R3** – The ~~Generator Owner and Transmission Owner will have at least one year to develop internal processes and procedures~~ implementation period for developing the development of a Corrective Action Plan (CAP) for addressing is set to be consistent with Requirement R2 to begin during the fourth calendar year of adoptions or approvals to address any Protection System for an identified Element that requires modification load-responsive protective relays determined in Requirement R2 not to meet ~~PRC-206-1~~ the Attachment B, Criteria A and B criteria.

~~**Requirement R6**~~ **R4** – The ~~Generator Owner and Transmission Owner will have at least one year to develop internal processes and procedures~~ implementation period for implementing any CAPs developed in this Requirement R5 is set to be consistent with Requirement R3, the development of a CAP.