

# 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 ~~all applicable entities~~ the Planning Coordinator to identify the Element(s) according to the criterion in ~~the Requirements~~ Requirement R1.
3. The need for the Generator Owner or Transmission Owner to 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 need for the Generator Owner or Transmission Owner to obtain agreement from the Planning Coordinator, Reliability Coordinator, and Transmission Planner where necessary.~~
- ~~5. The amount of work that the Generator Owner or Transmission Owner will need from a Planning Coordinator or Transmission Planner to perform simulations.~~
- ~~6.4. \_\_\_\_\_ The period of time for a Generator Owner or Transmission Owner to take an Element outage, if necessary, to modify the Protection System is driven through the develop a Corrective Action Plan (CAP) and is independent of the standard's implementation period. The CAP includes to modify its own timetable which is at the discretion of the entity. Protection System.<sup>1</sup>~~

<sup>1</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

~~Reliability Coordinator~~

Transmission Owner

~~Transmission Planner~~**Effective Date****Requirements R1-R3, R5, and R6**

First day of the first full calendar year that is ~~twelve~~12 months ~~beyond~~after the date that ~~this~~the standard is approved by ~~an~~ applicable ~~regulatory authorities, or governmental authority or as otherwise provided for in those jurisdictions~~a jurisdiction where regulatory 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 becomes~~shall become~~ effective on the first day of the first full calendar year that is ~~twelve~~12 months ~~beyond~~after the date ~~this~~the standard is ~~approved~~adopted by the NERC Board of Trustees, or as otherwise ~~made~~provided for in that jurisdiction.

**Requirement 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 pursuant 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 ~~laws applicable~~ Effective Date of R4**

During the implementation of the standard, notifications are likely to ~~such ERO governmental authorities~~ occur prior to Requirement R4 becoming effective. Where notification under R1 or identification under Requirement R2 or R3 occurs prior to the Effective Date of Requirement R4, the 12 month time period in Requirement R4 will begin from the Effective Date of Requirement R4. Thereafter, entities will follow the 12 month time period in R4. The intention of the additional time for R4 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 ~~a minimum of one full calendar year sufficient time~~ for the Generator Owner, Planning Coordinator, ~~Reliability Coordinator, and~~ Transmission Owner, ~~and Transmission Planner~~ to begin ~~the annual cycle of~~ becoming compliant with the standard ~~regardless of the approval timing by the applicable NERC Board of~~

Trustees or ERO governmental authorities. For example, if. The Effective date is constructed such that once the standard is adopted or approved on September 1, 2015, the standard would become effective on January 1, 2017 in the first whole calendar year after approvals that is 12 months for Requirements R1-R3, R5, and R6, and 36 months for Requirement R4.

Requirement R1 – The Planning Coordinator will have at least one full calendar year to prepare itself to identify any Elements that meet the criteria and notify the respective Generator Owner and Transmission Owner of any identified Elements 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 its load-responsive protective relays for an identified Element pursuant to Requirements R1, R2, and R3. 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 – The Generator Owner and Transmission Owner will have at least one year to develop internal processes and procedures for developing a Corrective Action Plan (CAP) for addressing any Protection System for an identified Element that requires modification to meet PRC-206-1 – Attachment B, Criteria A and B.

Requirement R6 – The Generator Owner and Transmission Owner will have at least one year to develop internal processes and procedures for implementing any CAPs developed in Requirement R5.