

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 Element(s) according to the criterion in 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 period of time for a Generator Owner or Transmission Owner to develop a Corrective Action Plan to modify its Protection System.¹

Applicable Entities

Generator Owner

Planning Coordinator

Transmission Owner

¹ 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.

Effective Date

Requirements R1-R3, R5, and R6

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 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 R4

During the implementation of the standard, notifications are likely to 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 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 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.