# Implementation Plan Project 2010-13.2 - Relay Loadability: Generator

# **Requested Approvals**

PRC-025-1 – Generator Relay Loadability

AMERICAN ELECTRIC

RELIABILITY CORPORATION

# **Requested Retirements**

None

#### **Prerequisite Approvals**

None

**Revisions to Defined Terms in the NERC Glossary** 

• None

#### Background

The Implementation Plan period reflects consideration of the following:

- 1. The Generator Owner will likely find it necessary to adjust the existing load responsive protective relay settings on its generation unit(s) to comply with this standard, and it will be necessary for the plant to be off-line in order to make these adjustments.
- 2. The Generator Owner may find it necessary to replace portions of their existing protective relaying in order to comply with this standard. In such cases, the Generator Owner may need to budget the necessary work, engineer the necessary adjustments, coordinate with other entities, and procure certain materials. Further, the Generator Owner may require an outage of significant duration in order to apply settings, perform necessary testing, and replace any necessary components.
- 3. It is not beneficial to reliability for a Generator Owner to remove a generation unit from service solely to achieve compliance with this standard. Additionally, the implementation recognizes that the time between scheduled outages depends on the nature of the generation plant and may be as long as 24 months. Due to the time between scheduled outages, the implementation plan also considers the time required to budget and procure the necessary material; therefore, provides a 48-month period for becoming 100% compliant with the standard.
- 4. For a Generator Owner with a sizable generation fleet, the implementation plan provides time for staggered outages.

# **General Considerations**

To be developed in draft 2 based on industry comment.

# NERC

#### **Applicable Entities**

Generator Owner

# **Effective Date**

#### **New Standard**

PRC-025-1 First day of the first calendar quarter beyond the date that this standard is approved by applicable regulatory authorities, or in those jurisdictions where regulatory approval is not required, the standard becomes effective on the first day of the first calendar quarter beyond the date this standard is approved by the NERC Board of Trustees, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.

#### **Standards for Retirement**

N/A

# **Implementation Plan for Definitions**

No definitions are proposed as a part of this standard.

# Implementation Plan for PRC-025-1, Requirement R1

#### Load responsive protective relays subject to the standard

The Generator Owner that owns load-responsive protective relays applicable to this standard shall be 100% compliant 48 months beyond the effective date of this standard.

#### Load responsive protective relays which become applicable to the standard

The Generator Owner that owns load responsive protective relays that become applicable to this standard, (not because of the actions of the Generator Owner, including, but not limited to changes in NERC Registration Criteria, Bulk Electric System (BES) definition, or any other non-Generator Owner action), shall be 100% compliant on the first day of the first calendar quarter that is 48 months beyond the date such change is effected by an applicable regulatory authority, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.

### **Revisions or Retirements to Already Approved Standards**

The following table identifies the sections of the approved standard that shall be retired or revised when this standard is implemented. If the drafting team is recommending the retirement or revision of a requirement, that text is blue.

Already Approved Standard	Proposed Replacement Requirement(s)
New Standard – Not Applicable	PRC-025-1
	<b>R1.</b> Each Generator Owner shall install settings that are in accordance with <i>PRC-025-1</i> – <i>Attachment 1: Relay Settings</i> , on each load-responsive protective relay while maintaining reliable protection. [ <i>Violation Risk Factor: High</i> ] [ <i>Time Horizon: Long-Term Planning</i> ]
Notes: This requirement meets the directive in Order No. 733, paragraph 102.	