

Implementation Plan for PRC-005-02

Standards Involved:

- Approval:
 - PRC-005-2 – Protection System Maintenance and Testing
- Retirements: (phased to coincide with each entity’s implementation of PRC-005-2 as specified in the Implementation Plan for Requirements R1 through R3 later in this document):
 - PRC-005-1 – Transmission and Generation Protection System Maintenance and Testing
 - PRC-008-0 – Implementation and Documentation of Underfrequency Load Shedding Equipment Maintenance Program
 - PRC-011-0 – Undervoltage Load Shedding System Maintenance and Testing
 - PRC-017-0 – Special Protection System Maintenance and Testing

Prerequisite Approvals:

- Revised definition of “Protection System”

Background:

The Implementation Plan reflects consideration of the following:

1. The requirements set forth in the proposed standard establish maximum allowable maintenance intervals for the first time. The established maximum allowable intervals may be shorter than those currently in use by some entities.
2. For entities using longer intervals than the maximum allowable intervals established in the proposed standard, it is unrealistic for those entities to be immediately in compliance with the new intervals. Further, entities should be allowed to become compliant in such a way as to facilitate a continuing maintenance program.
3. Entities that have previously been performing maintenance within the newly specified intervals may not have all the documentation needed to demonstrate compliance with all of the maintenance activities specified.
4. The Implementation Schedule set forth in this document requires that entities develop their revised Protection System Maintenance Program within 12 months following applicable regulatory approvals, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter twelve months following Board of Trustees adoption.
5. The Implementation Schedule set forth in this document further requires implementation of the revised Protection System Maintenance Program in roughly equally-distributed steps over the maintenance intervals prescribed for each respective maintenance activity in order that entities may implement this standard in a systematic method that facilitates an effective ongoing Protection System Maintenance Program.

General Considerations:

Each Transmission Owner, Generator Owner, and Distribution Provider shall follow the protection system maintenance and testing program it used to perform maintenance and testing to comply with PRC-005-1, PRC-008-0, PRC-011-0, and PRC-017-0 (for the Protection System components identified in PRC-005-2 Tables 1-1 through 1-5) until that Transmission Owner, Generator Owner or Distribution

Provider meets initial compliance for maintenance of the same Protection System component, in accordance with the phasing specified below.

For audits that are conducted during the time period when entities are modifying their existing protection system maintenance and testing programs to become compliant with the maintenance activities and intervals specified in PRC-005-2, each responsible entity must be prepared to identify:

- All of its applicable protection system components.
- For each component, whether maintenance of that component is ~~still~~ being addressed according to PRC-005-2 or under PRC-005-1 ~~or is being performed according to PRC-005-2, PRC-008-0, PRC-011-0, or PRC-017-0.~~
- Evidence that each component has been maintained under the relevant requirements.

Retirement of Existing Standards:

The existing Standards PRC-005-1, PRC-008-0, PRC-011-0, and PRC-017-0 shall be retired upon regulatory approval of PRC-005-2.

Implementation Plan for Definition:

Protection System Maintenance Program – Entities shall use this definition when implementing any portions of R1, R2 and R3 which use this defined term.

Implementation Plan for Requirement R1:

- Entities shall be 100% compliant on the first day of the first calendar quarter ~~twelve (12)~~ months following applicable regulatory approvals, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~twelve~~ twenty-one (21) months following Board of Trustees adoption.

Implementation Plan for Requirements R2 and R3:

1. For Protection System components with maximum allowable intervals of less than 1 year, as established in Tables 1-1 through 1-5:
 - a. The entity shall be 100% compliant on the first day of the first calendar quarter 15 months following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~15~~ 24 months following Board of Trustees adoption.
2. For Protection System components with maximum allowable intervals 1 year or more, but 2 years or less, as established in Tables 1-1 through 1-5:
 - a. The entity shall be 100% compliant on the first day of the first calendar quarter ~~3 calendar years~~ 36 months following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~3 calendar years~~ 48 months following Board of Trustees adoption.
3. For Protection System components with maximum allowable intervals of 3 years, as established in Tables 1-1 through 1-5:

- a. The entity shall be at least 30% compliant on the first day of the first calendar quarter ~~2 calendar years~~24 months following applicable regulatory approval (or, for generating plants with scheduled outage intervals exceeding two ~~calendar~~ years, at the conclusion of the first succeeding maintenance outage), or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~2 calendar years~~36 months following Board of Trustees adoption.
 - ~~b. The entity shall be at least 60% compliant on the first day of the first calendar quarter 3 calendar years following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter 3 calendar years following Board of Trustees adoption.~~
 - ~~e.b. The entity shall be 100% compliant on the first day of the first calendar quarter 4 calendar years~~36 months following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~4 calendar years~~48 months following Board of Trustees adoption.
 - c. The entity shall be 100% compliant on the first day of the first calendar quarter 48 months following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter 60 months following Board of Trustees adoption.
4. For Protection System components with maximum allowable intervals of 6 years, as established in Tables 1-1 through 1-5:
 - a. The entity shall be at least 30% compliant on the first day of the first calendar quarter ~~3 calendar years~~36 months following applicable regulatory approval (or, for generating plants with scheduled outage intervals exceeding ~~two calendar~~three years, at the conclusion of the first succeeding maintenance outage), or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~3 calendar years~~48 months following Board of Trustees adoption.
 - b. The entity shall be at least 60% compliant on the first day of the first calendar quarter ~~5 calendar years~~60 months following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~5 calendar years~~72 months following Board of Trustees adoption.
 - c. The entity shall be 100% compliant on the first day of the first calendar quarter ~~7 calendar years~~84 months following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~7 calendar years~~96 months following Board of Trustees adoption.
5. For Protection System components with maximum allowable intervals of 12 years, as established in Tables 1-1 through 1-5 and Table 2:
 - a. The entity shall be at least 30% compliant on the first day of the first calendar quarter ~~5 calendar years~~60 months following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~5 calendar years~~72 months following Board of Trustees adoption.
 - b. The entity shall be at least 60% compliant on the first day of the first calendar quarter following 9 calendar years108 months following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter 120 months following Board of Trustees adoption.

- ~~b.c.~~ The entity shall be 100% compliant on the first day of the first calendar quarter 156 months following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~9 calendar years~~ 168 months following Board of Trustees adoption.
- ~~e.~~ The entity shall be 100% compliant on the first day of the first calendar quarter 13 calendar years following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, on the first day of the first calendar quarter ~~13 calendar years~~ following Board of Trustees adoption.

Applicability:

This standard applies to the following functional entities:

- Transmission Owners
- Generator Owners
- Distribution Providers