TEXAS RE

# NSRF PRC-005-6 R3

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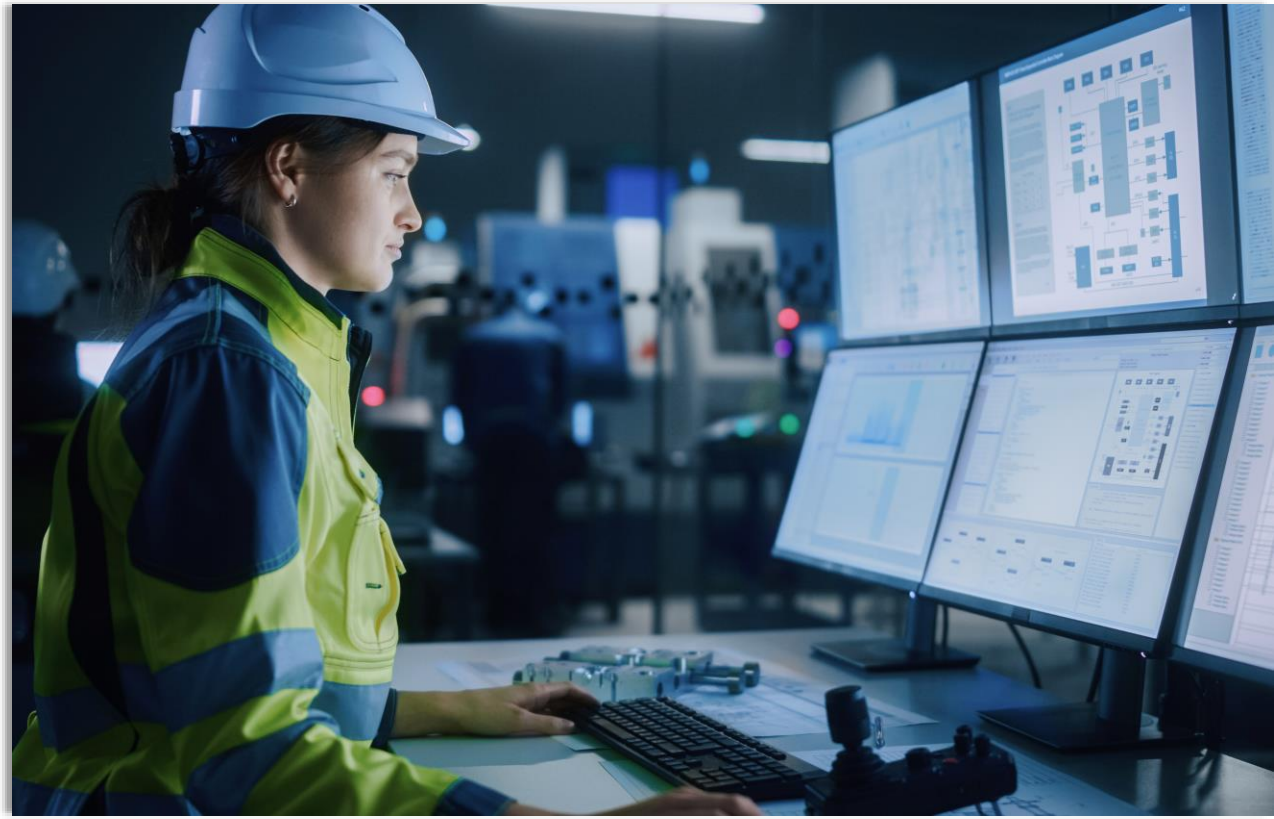
May 16, 2024

# PRC-005-6 Background

## Background

- PRC-005-6 is one of the top Operations & Planning Standard discovered as of 2024
- Texas RE includes in their Align Instructions the Texas RE PRC-005-6 R3 spreadsheet tool



# PRC-005-6 Overview

## Purpose

To reliably document and implement programs for the maintenance of all Protection Systems, Automatic Reclosing, and Sudden Pressure Relaying that affects the reliability of the bulk electric system (BES)

## Applicability

- Transmission Owner (TO)
- Generator Owner (GO)
- Distribution Provider (DP)

## Requirement

Applicable entities must have a maintenance program for Protection Systems and be able to demonstrate they are carrying out such a program. There are no specifics regarding the technical requirements for Protection System maintenance programs

# The WHY?

The purpose of having a well-documented process is not only to demonstrate compliance, but also to visually keep track of all the different maintenance plans for each device so they are followed, and the BES is secure.

PRC-005-6 R3 is a complex Standard that requires registered entities to keep track of multiple maintenance plans for many different devices. This task can seem overwhelming at first but with the right tools and processes, this objective can be achieved.

# Best Practices

The Texas RE PRC-005-6 R3 spreadsheet tool helps make a complicated standard easier to maintain and view

Dated evidence within the monitoring period should be clear on what activity was performed and ideally annotated

Reach out to Texas RE Compliance early on with PRC-005-6 questions so they can help and plan accordingly to assist

# Unique Identifiers

An example of a Unique Identifier would be the serial number of a device but can be anything found in maintenance records to help link specific devices to maintenance plans.

A unique identifier for a device can be listed multiple times if multiple maintenance intervals are applicable to the device (i.e., station dc supply 4 months, 18 months, and 6 years).

Texas RE is currently working to improve the PRC-005 Spreadsheet

| This field is prepopulated and will be used as a sampling reference as necessary | Substation the device/equipment is located in. Refer to the list provided in the "Substation List" Sheet. | Select the Protection System Component Type for each device (protective relays, voltage and current sensing, communications systems, station dc supply, control circuitry). | Select "X" if this device is associated with RAS Protection Systems. | Select "X" if this device is associated with UFLS Protection Systems. | Select "X" if this device is associated with UVLS Protection Systems. | List the device/equipment unique identifier. List the device/equipment unique identifier multiple times if multiple maintenance intervals are applicable to device (i.e. station dc supply). The unique identifier should be identified in the maintenance records. | List the device/equipment manufacturer and model. |
|---|---|---|---|---|---|---|---|
| Index | Substation | Protection System Component Type | RAS | UFLS | UVLS | Unique Identifier | Equipment Manufacturer and Model |
| PS04974 | | | | | | Z107106 | |
| PS04975 | | | | | | | |
| PS04976 | | | | | | | |
| PS04977 | | | | | | | |

# Implementation Plan

PRC-005-6 has an exceptionally long implementation plan which requires specific devices to be transitioned over a period

A device must first be maintained in accordance with the PRC-005-6 maintenance activities before it can be considered transitioned

If a device was tested on version 6 then it can transition at any time since device was already tested

# Reference Links

- PRC-005-6 Spreadsheet Tool
- PRC-005-6 Implementation Plan
- Texas Review May Edition


TEXAS RE
Ensuring electric reliability for Texans