**[Registered Entity Name]**

**NERC ID: [NCRXXXXX]**

**PRC-024-3 — Frequency and Voltage Protection Settings for Generating Resources - R1, R2**

**4th Quarter 2023 Self-Certification**

# Instructions

1. Populate the cover page by adding your registered entity’s name and NERC Identification NCR number.
2. Download Reliability Standard PRC-024-3from NERC’s website (optional for reference): <https://www.nerc.com/pa/Stand/Reliability%20Standards/PRC-024-3.pdf>
3. Complete the steps listed for each Reliability Standard Requirement listed under **Assessment Guidance.**
4. Log into **Align** and complete your Self-Certification response (see Align for Registered Entities video, Section [9.0 Self-Certifications](https://training.nerc.net/Home/ViewApplicationVideos?system=Align&role=Registered%20Entities)).
5. Submit your registered entity’s response via the ERO Secure Evidence Locker (ERO SEL) Site:
   1. This completed Worksheet;
   2. Completed Q4 2023 PRC-024 SC Testing Workbook.xlsx;
   3. Specific evidence requested within this document and referred in Testing Workbook. Please make sure to (1) use unique file names for each evidence file submitted and (2) identify within your narratives which specific evidence files support each response made. These references and the use of unique file names help facilitate and expedite MRO’s review of the Self-Certification work that has been performed; and
   4. Any internal control(s) information related to the Reliability Standard and Requirement(s) in scope with supporting documentation of design and implementation of the internal control(s).

# Purpose of Standard:

To set protection such that generating resource(s) remain connected during defined frequency and voltage excursions in support of the Bulk Electric System (BES).

# Applicability:

Generator Owners that apply protection listed in Section 4.2.1 of Standard PRC-024-3.

# Scope:

The scope for this Self-Certification is PRC-024-3 – Frequency and Voltage Protection Settings for Generating Resources, Requirements R1, R2. Each Responsible Entity shall include the data from the **monitoring period between 10/01/2022 - 07/31/2023,** as applicable for each step in the Assessment Guidance below.

# Assessment Guidance

Follow and complete each tab of the Q4 2023 PRC-024 SC Testing Workbook.xlsx to complete the sampling process and to provide the requested documentation.

Sampling Steps:

1. Generate resource population to include only **Inverter Based Resources**;
2. Random sample 8 resources if the poplulation is 8 and above; Or sample the entire population if the resource population is less than 8; (A random sample can be selected using statistical functions available in Microsoft Excel or through use of RAT-STATS, a free sampling tool available from the U.S. Department of Health & Human Services Office of Inspector General.)
3. For the sampled resources, generate protection population;
4. Random sample 1 frequency protection and 1 voltage protection for each resource;
5. Complete R1 Testing and R2 Testing tabs, return Workbook with all the files and evidence for review.

Also provide supporting evidence of the sampling process used including: (1) full population, (2) samples selected, and (3) output from the statistical function used to perform the sampling (e.g. RAT-STATS output). Depending on the sampling method/software used, a screenshot or creation of a PDF file to capture the sampling output may be required.

|  |  |
| --- | --- |
| ***File(s) Contents*** | ***File Name / Page(s)*** |
| **Full Population** |  |
| **Samples Selected** |  |
| **Statistical Function Output** |  |
| **Comments** |  |

**Internal Controls**

1. **Implementation and Testing Internal Control(s)**

Required (Provide information for Option 1 or Option 2):

The internal controls sections provided below are meant to allow entities to choose their best approach to provide their internal control(s) information. **Option 1** is to allow registered entities to provide their information as they see applicable and in their desired format. **Option 2** is to assist registered entities with specific questions on how it is reaching reasonable assurance for compliance to **PRC-024-3 - R1, R2.**

***Internal Controls Option 1:***

Provide information that shows:

1. Internal controls incorporation into global program for **PRC-024-3 - R1, R2**
2. Internal controls design (process, procedures, etc. ...)
3. Internal controls implementation/operational evidence (control tests or evidence showing execution of the internal controls indicated)

Please indicate in this table:

|  |  |
| --- | --- |
| **All Internal Control(s) related to PRC-024-3 - R1, R2** | |
| **Global Program Filename(s)** |  |
| **Comments** |  |
| **Internal Controls Design Filename(s)** |  |
| **Comments** |  |
| **Internal Controls Implementation and/or Operational Evidence Filename(s)** |  |
| **Comments** |  |

***Internal Controls Option 2:***

The following questions may be used as an optional approach to address internal controls for **PRC-024-3 - R1, R2.**

*Note: These questions are similar to those used by MRO in audit engagements. If a process or the implementation is not documented, provide comments of internal control(s) and indicate “not applicable” in supporting evidence fields.*

1. Requirement R1
   1. State a control action, i.e., How do you ensure to capture all the frequency protection applicable to PRC-024-3?

|  |  |
| --- | --- |
| **Comments** |  |
| **Supporting Evidence Filename(s)** |  |

b. State a control action: How do you ensure settings and calculations are accurate for all the frequency protection?

|  |  |
| --- | --- |
| **Comments** |  |
| **Supporting Evidence Filename(s)** |  |

c. State a control action: How do you ensure updates are monitored and shared with appropriate parties?

|  |  |
| --- | --- |
| **Comments** |  |
| **Supporting Evidence Filename(s)** |  |

d. State a control action: Other internal controls not addressed above

|  |  |
| --- | --- |
| **Comments** |  |
| **Supporting Evidence Filename(s)** |  |

1. Requirement R2
   1. State a control action: How do you ensure to capture all the voltage protection applicable to PRC-024-3?

|  |  |
| --- | --- |
| **Comments** |  |
| **Supporting Evidence Filename(s)** |  |

b. State a control action: How do you ensure settings and calculations are accurate for all the voltage protection?

|  |  |
| --- | --- |
| **Comments** |  |
| **Supporting Evidence Filename(s)** |  |

c. State a control action: How do you ensure updates are monitored and shared with appropriate parties?

|  |  |
| --- | --- |
| **Comments** |  |
| **Supporting Evidence Filename(s)** |  |

d. State a control action: Other internal controls not addressed above

|  |  |
| --- | --- |
| **Comments** |  |
| **Supporting Evidence Filename(s)** |  |

Did the responses provided in the Q4 2023 PRC-024 SC Testing Workbook show compliance for Requirement R1?

☐ Yes, respond “Compliant” for Requirement **R1** to the Self-Certification in Align. Include a comment summary and upload supporting documentation to the ERO SEL.

☐ No, respond “Not Compliant” for Requirement **R1** to the Self-Certification in Align. Include a comment summary based on potential issues and upload supporting documentation to the ERO SEL.

☐ Do not own, respond “Do Not Own” for Requirement **R1** to the Self-Certification in Align. Include comments supporting the “Do Not Own” response and upload supporting documentation to the ERO SEL.

☐ Do not meet the applicability requirements of the full standard, respond “Not Applicable” for Requirement **R1** to the Self-Certification in Align. Include comments supporting the “Not Applicable” response and upload supporting documentation to the ERO SEL. This response should not be used if the circumstance within the standard or requirement language did not happen. This response should only be used if the requirement or standard is not applicable at all to the entity (such as not registered for the function).

Did the responses provided in the Q4 2023 PRC-024 SC Testing Workbook show compliance for Requirement R2?

☐ Yes, respond “Compliant” for Requirement **R2** to the Self-Certification in Align. Include a comment summary and upload supporting documentation to the ERO SEL.

☐ No, respond “Not Compliant” for Requirement **R2** to the Self-Certification in Align. Include a comment summary based on potential issues and upload supporting documentation to the ERO SEL.

☐ Do not own, respond “Do Not Own” for Requirement **R2** to the Self-Certification in Align. Include comments supporting the “Do Not Own” response and upload supporting documentation to the ERO SEL.

☐ Do not meet the applicability requirements of the full standard, respond “Not Applicable” for Requirement **R2** to the Self-Certification in Align. Include comments supporting the “Not Applicable” response and upload supporting documentation to the ERO SEL. This response should not be used if the circumstance within the standard or requirement language did not happen. This response should only be used if the requirement or standard is not applicable at all to the entity (such as not registered for the function).

# Document Submittals

MRO requires copies of the following be submitted with the Self-Certification response:

1. This Worksheet and Q4 2023 PRC-024 SC Testing Workbook.
2. Supporting documentation referenced in the Assessment Guidance and Q4 2023 PRC-024 SC Testing Workbook.
3. Evidence supporting the Internal Controls Option 1 or Option 2 for each requirement.

Please make sure to use unique file names for each evidence file submitted, and identify within your responses to the steps above which specific evidence files support each conclusion made. These references and the use of unique file names helps facilitate and expedite MRO’s review of the Self-Certification work that has been performed.

All other data related to the registered entity’s analysis and Self-Certification response are to be retained for at least 180 days after the submission date. MRO staff may request submission of additional information at a later date to verify accuracy of Self-Certification submittals.