Unofficial Comment Form
Project 2018-04 Modifications to PRC-024-2

Do not use this form for submitting comments. Use the Standards Balloting and Commenting System (SBS) to submit comments on the Project 2018-04 Modifications to PRC-024-2 Supplemental Authorization Request (SAR). Comments must be submitted by 8 p.m. Eastern, Friday, July 26, 2019.

Additional information is available on the project page. If you have questions, contact Standards Developer, Mat Bunch (via email) or at (404) 446-9785.

Background Information
On November 27, 2018, the NERC Operating Committee (OC) and Planning Committee (PC) submitted a SAR prepared by the Inverter-Based Resource Performance Task Force (IRPTF), which reports to the OC and PC. Based off the disturbance analyses and development of the PRC-024-2 Gaps Whitepaper, the IRPTF identified potential modifications to PRC-024-2 to help ensure inverter-based generator owners, operators, developers, and equipment manufacturers understand the intent of the standard for their plants to respond to grid disturbances to contribute to the reliable operation of the Bulk Power System. The initial SAR proposed to revise PRC-024-2 to address those identified issues regarding inverter-based resources and to address ambiguities, inconsistencies, and technical errors within the existing standard. The SAR was posted from December 19, 2018 – January 18, 2019, and during that posting, NERC solicited volunteers to serve on the project drafting team. The Standards Committee accepted the SAR and appointed the drafting team on February 20, 2019.

During its discussions, the standard drafting team (SDT) identified two issues within PRC-024 that must be addressed to ensure the reliability intent of the standard is achieved.

1. The existing standard refers only to "generator protective relaying" which seems to exclude the setting of voltage and frequency protection relays on the Generator Step-Up Transformer (GSU) associated with synchronous generators. Because the GSU and the generator are connected to the same bus and have the same source (the generator), they see the same voltage (and frequency). Consequently, the voltage and frequency protection settings applied to the relays on the GSU must be included in the standard as the operation of those relays would result in tripping the generator, thus defeating the reliability intent of the standard. Note: This situation does not exist for dispersed power producing resources because the associated collector transformer is included via Inclusion I4 of the BES definition and in the standard through footnotes 2, 3, and 4. The Supplemental SAR expands the scope of the project to include the setting of voltage and frequency protective relays (if applied) on GSUs.

2. The existing standard is applicable only to Generator Owners which excludes instances where the Transmission Owner is the Registered Entity that owns the GSU or collector transformer and the associated voltage and frequency protective relays. This exclusion defeats the reliability intent of the standard.
The Supplemental SAR expands the scope of the project to allow the inclusion of Transmission Owners that own the GSU or collector transformer with the applicable voltage and frequency protection activated.

Because of the change to the Applicability Section of the standard, NERC staff will provide notice to stakeholders that the ballot pool for Project 2018-04 Modifications to PRC-024-2 (page linked above) will be reopened for the first 30 days of the next comment and ballot period so that anyone not currently in the ballot pool can join.

Questions

1. Do you agree with the scope of the Supplemental SAR to include the setting of voltage and frequency protective relays (if applied) on GSUs or collector transformers? If you do not agree, or if you agree but have comments or suggestions, provide your recommendation or proposed modification below.
   - [ ] Yes
   - [ ] No
   Comments:

2. Are you aware of any organizations registered as a Transmission Owner (but not registered as Generator Owner) that own a GSU or collector transformer and apply the applicable protection listed above? If so, please provide an example and any relevant technical information.
   - [ ] Yes
   - [ ] No
   Comments:

3. If you have any other comments on this SAR that you haven’t already mentioned above, provide them here.
   Comments:
   A Standard Authorization Request (SAR) comment form should not be used to collect data needed to justify the SAR. If data needs to be collected, then a Section 1600 data request could be considered. After data is collected, then a determination can be made regarding next steps. The applicability of PRC-024 should remain as Generator Owners, at this time.