

Individual or group. (25 Responses)
Name (13 Responses)
Organization (13 Responses)
Group Name (12 Responses)
Lead Contact (12 Responses)
Question 1 (21 Responses)
Question 1 Comments (21 Responses)
Question 2 (21 Responses)
Question 2 Comments (21 Responses)
Question 3 (21 Responses)
Question 3 Comments (21 Responses)
Question 4 (21 Responses)
Question 4 Comments (21 Responses)

Group
Arizona Public Service Company
Kristie Cocco
Yes
No
The individual generating unit of a dispersed power producing resources has negligible impact on BES performance and should be completely exempt from this requirement in PRC-019, very similar to exemption in PRC-001-1.1(x). Making the standard applicable to individual disperse power producing unit is inappropriate use of the limited resources.
Yes
No
Group
Northeast Power Coordinating Council
Guy Zito
No
Although outside of the scope of the work of this Drafting Team, R3.1, as well as all Parts of this standard should be identified as 3.1, etc., and the wording in the added text made consistent with NERC format preferences. Requirement R3.1 should be Part 3.1. Because this is a format change, it should be able to be incorporated in this revision. Also outside the scope of the SAR would be a revision to the Applicability. This standard is not applicable to the Balancing Authority and Host Balancing Authority. Protective system in R3 and Part 3.1 should be replaced with the defined term Protection System. The reference to protective system in the Rationale for Applicability Exclusion in Requirement R3.1 should be revised accordingly.
Yes
Yes
We agree with the revisions proposed in footnotes 4 and 6. However, frequency and voltage protective relays require coordination with other protective relays implemented elsewhere on the BES. However, PRC-001-1.1(X) Part 3.1 is excluding coordination of protective relays for Inclusion I4 which contradicts footnotes 4 and 6.
Yes
Regarding PRC-024-1(X), the Rationale Box entitled Rationale for Footnotes 2 and 4 should be renamed Rationale for Requirement R1. Footnote 2 does not appear in R1, or on page 4 of the redline. The wording in the Rationale Box entitled Rationale for Footnotes 2 and 4 "...are set within the "no-trip zone" is confusing, as it could easily be interpreted to mean that relays should be set to

trip within the "no-trip zone" which is a contradiction. Suggest rewording to "...are set such that the generator frequency protective relaying does not trip the applicable generating unit(s) within the "no-trip zone"...".
Individual
John Falsey
Invenergy LLC
Individual
John Falsey
Invenergy LLC
Individual
Barbara Kedrowski
Wisconsin Electric Power Company
Yes
Yes
No
We are concerned about the evidence required for dispersed power producing resources in measures M1 and M2. Since these devices are expected to be excluded from PRC-005, we will not be required to have calibration or maintenance records for evidence of compliance. We would like measures M1 and M2 of the standard to clearly state that evidence can be original design documents and no periodic testing or verification is required.
No
Individual
David Jendras
Ameren
Individual
Maryclaire Yatsko
Seminole Electric Cooperative, Inc.
Yes
Seminole requests the drafting team to clarify that R3.1 still requires system protection coordination for generating units covered by I4 of the BES definition, however, that this coordination can take place at the aggregation or interconnection point, instead of at the individual unit.
Yes
Yes
Yes
Individual
David Kiguel
David Kiguel
No
It should be recognized that there might be cases (though rare) where coordination is actually required. Rather than removing applicability of Requirement 3.1 altogether, the standard should require that an assessment of whether coordination is required be performed jointly by the TOP and the GOP. The assessment should address any involved BES elements. If the conclusion of the assessment is that no coordination is required for certain parts of the protections, then and only then, such coordination can be omitted.

Yes
Yes
No
Individual
Thomas Foltz
American Electric Power
Yes
The last sentence in the rationale box, "...do not need to be coordinated with the transmission protective systems, as this coordination would not provide reliability benefits to the BES" might be better stated as "...do not need to be coordinated directly with the transmission protective systems due to the intervening collector system(s)."
Yes
Yes
Yes
The comment form states in part "Because two of the medium-priority standards have recently been revised or are undergoing revision in another current project..." In addition, the redline version of the standard states "Given the timing of concurrent standards development of PRC projects, PRC-024-1 may be retired pursuant to an Implementation Plan of a successor version of PRC-024." Both these comments infer that at least one other current project impacts PRC-024, but we cannot determine which project(s) that is. Could you provide some clarity on that?
Group
Dominion
Connie Low
Yes
No
Dominion does not believe the addition of 4.2.3.1 is necessary and, in fact introduces ambiguity. Some here read this addition as inferring that, only if the voltage control is applied at the individual resource (as identified in BES I4) would 4.2.3 apply to dispersed power producing resources. If SDT decides to retain, we suggest it be modified to state "This would also include voltage regulating controls that are performed solely at the individual resources dispersed power producing resources identified through Inclusion I4 of the Bulk Electric System definition."
No
It is Dominions understanding that these footnotes conflict with the IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems. Given possible changes to this standard are being actively discussed, Dominion suggests these footnotes not be included until the IEEE standard has implemented a conforming change.
Yes
The language used to describe the Inclusion I4 resources is not consistent. For example: PRC-001 states "individual generating units," PRC-019 states "individual resources," and PRC-024 states "individual generating units and aggregating equipment." Dominion believes the language used in the standard revisions should be consistent with the Inclusion I4 definition. That is: a) The individual resources, and b) The system designed primarily for delivering capacity from the point where those resources aggregate to greater than 75 MVA to a common point of connection at a voltage of 100 kV or above
Individual
John Seelke

Public Service Enterprise Group
No
We object to part 3.1 for two reasons: First, individual dispersed resources connected to a collector system will have a protection system and breaker for each generator to isolate them for a fault on the generator-side of that breaker. In the event any individual dispersed resource Protection System or associated breaker fails, the upstream Protection System will need open the main breaker to isolate the fault. The TOP needs to be informed of the upstream protection setting associated with failure an individual generator Protection System or breaker to operate. Second, the coordination of Protections Systems between GOs and TOs is the subject of Project 2007-06 – System Protection Coordination, and Project 2014-01’s SDT should send their concerns to this team so they may address them in their project.
Yes
Yes
No
Group
MRO NERC Standards Review Forum
Joe DePoorter
Yes
Yes
No
In order to provide relief for individual DGRs not being within compliance, the NSRF does recommend that perhaps there could be another set of VSLs established exclusively for DGRs. Case in point, if the entity finds one DGR that is not within the prescribed measures of Attachment 1 or 2, the entity would not be found non-compliant. Our recommendation would be for the Low VSL to >5% of DRGs were not within prescribed settings per Attachment 1 and 2 per of the aggregated Facility. This would allow a very small number of DGRs to have an issue. Or words to that affect. The NSRF believes this recommendation is aligned with the RAI program since one DGR (not within prescribed limits) will not impact the reliability of the BES.
No
Group
Corporate Compliance
Dianne Gordon
Yes
Yes
A possible edit would be to change 4.2.3.1 (regarding individual dispersed gen units) to 4.2.4. This may make the meaning of types of "Applicable Facilities" more clear to the reader.
Yes
Footnotes might be more clear if the language "... (potentially including non-BES equipment)..." were added.
No
Individual
Michael Hill
Tacoma Public Utilities

Yes
Yes
No
The changes to PRC-024-1(X) include the applicability of the standard to Bulk Power System equipment that is not BES equipment. The purpose of the BES definition is to provide bright line applicability criteria for utilities to better understand which assets are subject to regulatory standards. The revision contained in PRC-024-1(X) deviate from the BES definition. If NERC would like to include Non-BES equipment in the regulatory standards then NERC should modify the BES definition to that end. Should Rationale for Footnotes 2 and 4 be changed to Rationale for Footnotes 4 and 6?
No
Group
PacifiCorp
Sandra Shaffer
Yes
Yes
Yes
No
Group
SERC PCS
David Greene
Yes
Yes
If it is the intention of the SDT to exclude individual dispersed power producing resources from the list of Applicable Facilities when voltage regulating control is not performed solely at the individual resources, we suggest that the SDT include the word "only" in R4.2.3.1. "This includes individual dispersed power producing resources identified through Inclusion I4 of the Bulk Electric System definition only where voltage regulating control for the facility is performed solely at the individual resources"
Yes
No
The comments expressed herein represent a consensus of the views of the above-named members of the SERC PCS only and should not be construed as the position of SERC Reliability Corporation, its board, or its officers.
Individual
Michelle R. DAntuono
Ingleside Cogeneration LP
No
Ingleside Cogeneration LP (ICLP) believes that the project team's intent in R3.1 is to ensure that only the Protection Systems corresponding to 75+ MVA points of aggregation are applicable, but is not comfortable that the proposed update captures that point. In fact, it seems to only exclude those components protecting individual solar panels/windmills from the requirement to coordinate new

deployments and modifications with the BA and TOP. In our view, the intermediate aggregation points less than 75 MVA are of no practical interest to the BA and TOP – and should be specifically excluded from the requirement. Similarly, the applicability of Requirements R1, R2.1, and R5.1 should be limited to 75+ MVA aggregation points. Protection System awareness, failures that “reduce system reliability”, and changes in operating conditions that may affect a TOP’s Protection System are only meaningful at those capacity levels. In fact, if too much attention is placed on large numbers of very low-impact systems, there will less consideration made for those that really do present a risk to the BES.

No

ICLP believes that the way that the applicability criteria in PRC-019-2 has been re-framed only includes voltage regulating controls at the single dispersed unit level and at aggregation points at 75 MVA or greater. This omits those voltage controllers serving an entire string of wind mills or solar panels with combined capacity less than 75 MVA. We do not think that was the drafting team’s intent, and suggest that the language be clarified.

Yes

ICLP agrees that it makes sense to set the voltage and frequency ride-through settings consistently throughout a dispersed generation facility. We can think of no good technical reason to do otherwise. ICLP is concerned that an overly-enthusiastic CEA could assess a violation if a single relay record is missing among the thousands that would be covered by PRC-024-1(X), but agree that the RAI initiative has established an environment where a more reasonable compliance approach will be the norm.

No

Group

ACES Standards Collaborators

Jason Marshall

No

While we agree with the concepts and intent to exclude applicability of sub-requirement R3.1 to the individual units of dispersed power producing resources, we do not believe the actual implementation is correct. In an August 10, 2009 informational filing, NERC indicated to the Commission that they would use bulleted lists to indicate when “components may reflect a list of options that may be undertaken to achieve compliance.” Thus, we do not see how a sub-bullet of a sub-requirement can be used to change the applicability of the requirement. We believe the applicability section should be modified to limit applicability of the requirement.

No

We do not oppose applicability of PRC-019 to the individual dispersed power producing resources where voltage regulating control is performed at the individual unit. However, the proposed changes do not accomplish this and actually only serve to confuse the applicability of the standard. All NERC standards are applicable to individual Elements of the BES definition. Since the BES definition includes the individual units of dispersed power producing resource, PRC-019-2 is applicable to those units. Adding sub-section 4.2.3.1 that states this includes “individual dispersed power producing resources... where voltage regulating control for the facility is performed solely at the individual resources” does not add these Elements as they were already included. Furthermore, it does not exclude those individual dispersed power producing resources where voltage regulating control is performed at the aggregate level. The bottom line is that the rationale that is explained in the standard is not accomplished by this change. We believe this standard does not require modification to include “individual dispersed power producing resources... where voltage regulating control for the facility is performed solely at the individual resources” as these resources are already included. However, an explanation in the application guidelines section of the standard is warranted to explain the applicability.

Yes

No

Thank you for the opportunity to comment.

Individual
Larry Heckert
Alliant Energy
Yes
Yes
No
PRC-024-1X requirements R1 and R2 are using the terms "Protective Relaying" and "Protective Relay" with no definition provided for these terms within the NERC glossary of terms or within the standard itself. Footnote 3 is used to define how the term should be applied. The footnote suggests the previously undefined term "Protective Relaying" would be inclusive of any control equipment that contains protective functions. Although the footnote is only represented in standard PRC-024-01(X) and theoretically does not apply to other standards, it could introduce confusion in the other NERC standards that use these terms (e.g., if excitation controls are considered protective relaying under PRC-024, would they be considered as part of a protection system and require utilities to keep excitation control maintenance records under PRC-005?).
No
Group
SPP Standards Review Group
Shannon V. Mickens
Yes
Yes
Yes
Yes
We would suggest to the drafting team in reference to PRC-001-1.1(X) that you would evaluate adding the remaining Measures (M4, M5 and M6) to that particular section. Our concern would be that all the Measures Data pertaining to the Requirements has not been included and this has the potential of causing confusion on what evidence should be provided in an audit. Additionally, we would like the drafting team to provide more clarity on the why there's a Rationale Box for Footnotes 2 and 4 in reference to PRC-024-1(X). Footnote 2 pertains to interchangeable terms which has been revised to align with the definition of the BES. If the drafting team's objective is to focus on Footnotes 4 and 6, we would suggest changing the header of the Rationale Box to read "Rationale for Footnotes 4 and 6". Finally, we would suggest to the drafting team adding Rationale Boxes to all three standards. We feel this would provide clarity to the industry on the expectations of the Requirements in the standards as well as promoting consistency with other documentation associated with this project.
Individual
Venona Greaff
Occidental Chemical Corporation
Group
Bonneville Power Administration
Andrea Jessup
Yes
Yes

Yes
No
Individual
Jamison Cawley
Nebraska Public Power District
Yes
Yes
No
In the Rationale for Footnotes 2 and 4, the phrase “including any non-Bulk Electric System collection system equipment” is used. We feel this statement and approach need to be removed because this standard revision hinges on Inclusion I4 of the BES Definition. It is overreaching to add non-BES equipment into a standard. The BES definition serves to identify what facilities are or are not applicable to NERC standards. We feel this adds back to the confusion that was to be avoided with the revised BES Definition.
No
Group
FirstEnergy
Doug Hohlbaugh
Yes
While FirstEnergy (FE) agrees with the exclusion, it should not simply be left to inference that the remainder of the standard does apply to the I4 units at the collector or interconnection point. See FE comments to Question 4 for our suggested approach to add clarity.
Yes
See FE comments to Question 4.
Yes
FE agrees that the PRC-024-1 standard in regard to NERC BES facilities I4 should apply to the voltage protective relays applied on the individual power producing resources, as well as voltage protective relays applied on equipment from the individual power producing resource up to the point of interconnection. However, we believe the SDT should make use of a Facilities Applicability section 4.2 as is done in many NERC standards such as PRC-019-2. By adding a section 4.2, it would avoid the need for the footnote approach and make it clearer that the standard is applicable to the dispersed generation equipment by simply evaluating the Applicability Section and having two subsections 4.1 Functional Entities and 4.2 Facilities. See FE comments to Question 4 for additional information.
Yes
FE suggests the standard drafting team give consideration for making consistent use of Section 4 to include both a sub-section 4.1 Functional Entities and 4.2 Facilities. This would alleviate the need to bury pertinent information and clarity around what facilities are in scope within footnotes. Currently only PRC-019 includes both of these applicability sub-sections and they should be used in each standard. The sections may need to be written differently in each of the three standards but should be used in each. Furthermore, standard PRC-019-2 which currently uses sub-section 4.2 Facilities includes text that is simply repeats of what is stated in NERC BES Inclusion statement I2 which could be revised/simplified. As an example, FE believes that section 4 of PRC-019-2 could be written as follows: 4 Applicability 4.1 Functional Entities 4.1.1 Generator Owner 4.1.2 Transmission Owner 4.2 Facilities 4.2.1 Generator Owner – for the purpose of this standard, the term, “applicable Facility” shall mean NERC BES Definition Inclusion I2 and I4. Where voltage regulating control for the BES generation facility is performed solely at the individual resources, those facilities are also included. 4.2.2 Transmission Owner - for the purpose of this standard, the term, “applicable Facility”

shall mean a synchronous condenser that is a qualifying BES facility under NERC BES Definition Inclusion I5. As another example, standard PRC-001-1.1 could be written as follows: 4 Applicability 4.1 Functional Entities 4.1.1 Balancing Authorities 4.1.2 Transmission Operators 4.1.3 Generator Operators 4.2 Facilities 4.2.1 – This standard applies to all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher as clarified by the NERC BES definition Inclusion statements. In regard to Inclusion I4 this standard is not applicable to the individual generating units of dispersed power producing resources. One additional suggestion: Lastly, throughout the various standards there is a footnote indicating “The terms ‘dispersed generation resources’ and ‘dispersed power producing resources’ are used interchangeably in Project 2014-01 because the former term was used in the Standards Authorization Request for the project, while the latter term is in line with terminology used in the revised definition of the BES.” It appears this footnote is for informational purposes only during the development of standard and will be removed in the final clean version. If that is not the case, consider the need for a NERC Glossary of Term for Dispersed Generation Resource that would indicate it is synonymous with the NERC BES Definition in regard to Inclusion statement I4 for dispersed power producing resources.
Group
DTE Electric
Kathleen Black
Yes
No
This standard applies at the individual wind turbine level which is inconsistent with the revisions to PRC-001, PRC-004 and VAR-002, where the standards only apply where there is 75 MVA connected at 100kV or higher.
No
Please see our comment for Question 2.
No
No comment.

Additional Comments:

**MS Energy
Lance Bean**

PRC-001-1.1(X)

- In the new bullet item of R3.1, the standards drafting team refers to individual “generating units”. The BES definition Inclusion I4 includes the individual “resources”. In PRC-001-1.1(X), would it make sense to replace “generating units” with “resources” to be consistent with the BES definition?

PRC-024-1(X)

- Ahead of the Introduction, there is a statement “the text boxes within the Applicability section of the standard will be moved to the Application Guidelines Section of the standard”. The text box is not in the Applicability section, it is in B. Requirements, R1.
- The text box title is “Rationale for Footnotes 2 and 4”. The two new footnotes are 4 and 6. I assume footnotes 1 & 2 will be removed once the Standard is approved, so perhaps the existing title is acceptable.

- The text box refers to individual “generating units”. I think “generating units” should be changed to “resources”.
- The text box also includes the text “it is appropriate to require that protective relay settings...are set within the no-trip zone”. I think the statement should be “it is appropriate to require that protective relay settings...are **not** set within the no-trip zone”