

Consideration of Comments

Project 2014-01 Standards Applicability for Dispersed Generation Resources

The Project 2014-01 Drafting Team thanks all commenters who submitted comments on the standard. These standards were posted for a 45-day public comment period from November 5, 2014 through December 23, 2014. Stakeholders were asked to provide feedback on the standards and associated documents through a special electronic comment form. There were 25 sets of comments, including comments from approximately 98 different people from approximately 69 companies representing all 10 Industry Segments as shown in the table on the following pages.

All comments submitted may be reviewed in their original format on the standard's [project page](#).

This document contains the Project 2014-01 Standards Applicability for Dispersed Generation Resources (DGR) standard drafting team's (SDT) response to all industry comments received during this comment period. The DGR SDT encourages commenters to review its responses to ensure all concerns have been addressed. The DGR SDT notes that a significant majority of commenters agree with the DGR SDT's recommendations on the standards, but that several commenters expressed specific concerns. Some comments supporting the DGR SDT's recommendations are discussed below but in most cases are not specifically addressed in this response. Also, several comments in response to specific questions are duplicated in other questions, and several commenters raise substantively the same concerns as others. Therefore, the DGR SDT's consideration of all comments is addressed in this section in summary form, with duplicate comments treated as a single issue. Any comments made on another standard are addressed in the DGR SDT's response to comments on that standard.

1. Summary Consideration

Based on the results from the recent comment and ballot period, it appears that industry overwhelmingly agrees with the DGR SDT's recommendations on applicability changes to PRC-001; PRC-019; and PRC-024, to account for the unique characteristics of dispersed power producing resources¹ in the standards. However, there are some disagreements among stakeholders and suggestions for language revisions contained in industry comments. To the extent that there are comments beyond the scope of this SDT, those comments will be communicated to the appropriate team for consideration.

¹ 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.

The DGR SDT has carefully reviewed and considered each stakeholder comment and has revised its recommendations where suggested changes improve clarity and are consistent with DGR SDT intent and apparent industry consensus. Several commenters suggested non-substantive language changes for standard language as well as explanatory language, such as language in particular rationale boxes. The DGR SDT has carefully considered each comment and has implemented revisions as

appropriate follows:

- The DGR SDT made non-substantive revisions to align the terms referring to individual generating units of the dispersed power producing resources in PRC-001; PRC-019; and PRC-024 with one another.
- The DGR SDT revised the language in the Description of Current Draft section of PRC-001; PRC-019; and PRC-024 and PRC-001 the standard, as well as similar language in the standard's Implementation Plan to reflect that there are not any other current projects seeking to revise those standards.

~~However,~~ All recommended changes are non-substantive as contemplated by the NERC Standard Processes Manual and therefore do not require an additional ballot. The DGR SDT's consideration of all comments follows.

2. General Comments

At least one commenter recommended that the language describing individual generating units in PRC-001; PRC-019; and PRC-024 should be aligned with one another. The DGR SDT agrees and has therefore made non-substantive revisions to the terms to provide consistency of language among the recommended modifications.

At least one commenter requested that the DGR SDT consider the need for a NERC Glossary 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 to address the information contained in the footnote in the standard that indicates "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." The DGR SDT expects the use of the terms will be transitional, and that the term used in the NERC BES definition, as included in the Glossary of Terms Used in NERC Reliability Standards, will be the only term used to refer to dispersed generation resources on a going forward basis.

At least one commenter noted that 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..." and that additionally, 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," but that they were unable to determine another project seeking to

revise the standard. The DGR SDT agrees that there are not any other current projects seeking to revise PRC-024, and has revised the language in the Description of Current Draft section of the standard, as well as similar language in the standard's Implementation Plan.

3. PRC-001

At least one commenter suggested that the applicability sections should be modified to limit applicability of the requirements, rather than using “sub-bullets.” The SDT maintains that the approach of utilizing “sub-bullets” to change applicability has been supported by NERC staff during modification of this and other standards, and it is the position of the SDT that the current modification allows specific requirements to be targeted as needed, and that this approach appears to be overwhelmingly supported by the majority of the industry as evidenced by the submitted responses. Therefore, the DGR SDT declines to adopt this suggestion.

One commenter suggested that the standards should require an assessment of whether coordination must be performed jointly by the TOP and the GOP as an alternative to the DGR SDT’s suggested changes. Additional coordination is not precluded by the revised standard. Adding a further requirement to jointly assess the necessity of coordination between the TOP, host BA, and the GOP is beyond the scope of the DGR SDT. It is the DGR SDT’s position that the proposed revisions to the standard adequately support reliability and are consistent with current practices. Therefore, the SDT declines to adopt this suggestion.

At least one commenter expressed concern that there may be situations where the TOP should be informed of the upstream protection settings associated with failure of an individual generator Protection System or breaker to operate, and also suggested that the coordination of Protections Systems between GOs and TOs is the subject of Project 2007-06 - System Protection Coordination, and requested that the DGR SDT communicate their comments to that team so they may address them in their project as they determine appropriate. While the DGR SDT’s position will be communicated to the Project 2007-06 SDT, there is a need to address PRC-001 directly as this is still the effective standard. In the proposed modification, the “upstream protection systems,” that are at the point of aggregation of 75 MVA or greater are still in scope for dispersed power producing resources, and as such, will be coordinated with the TOP and host BA.

At least one commenter requested the drafting team clarify that R3.1 still requires system protection coordination for generating units covered by I4 of the BES definition, but that the coordination can take place at the aggregation or interconnection point, rather than at the individual unit level. Also, another commenter expressed concern that R3.1 only excludes individual generator protection equipment from coordinating with the host BA and TOP, and stated that, similarly, the applicability of Requirements R1, R2.1, and R5.1 should be limited to aggregation points greater than 75 MVA. The DGR SDT maintains that the proposed requirements of the standard adequately support reliability and are consistent with current practices. The proposed modifications to the standard limit the requirements to protective systems associated with the facilities at the point of aggregation of 75 MVA or greater (i.e. substation level protection systems). The applicability for Requirements R1 and R2.1 are explained in the White Paper. The DGR SDT has determined that the language; “that could require changes in the protection systems of others” adequately limits the scope of requirement R5.1.

One commenter requested that the DGR SDT consider adding Measures to Requirements R4, R5, and R6 of PRC-001; however, addressing Measures for which the DGR SDT did not modify the associated Requirement is beyond the scope of the DGR SDT's SAR.

4. PRC-019

At least one commenter suggested that individual generating units of dispersed power producing resources should be completely exempt from PRC-019's requirements, noting the similarity to the exemption in PRC-001-1.1(~~xii~~). Similarly, a commenter stated that applying the standard to the individual wind turbine level is inconsistent with the revisions to PRC-001, PRC-004 and VAR-002. It is the position of the DGR SDT that it is necessary to coordinate voltage regulating controls with the TOP and in the case where voltage control is solely accomplished at the individual unit level, the individual units should be included in the scope of this standard. The DGR SDT has maintained a consistent approach to its recommendations. The DGR SDT maintains that the standard should be applied at the individual unit level, as stated in 4.2.3.1., in order to accomplish the objective of the standard.

At least one commenter expressed concern that the applicability of PRC-019-2 excludes voltage regulating controllers serving a multiplicity of individual generating units with a combined capacity less than 75 MVA. The DGR SDT understands the comment to refer to voltage regulating control at the generating plant/Facility level of BES generators identified through inclusion I4 of the BES definition; however, the revisions to the standard proposed by the DGR SDT expanded the applicability from voltage regulating control at the plant/Facility level, such as voltage controllers serving a multiplicity of individual generating units, to also include individual generating units.

5. PRC-024

At least one commenter suggested that the footnotes conflict with the IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems and suggested the footnotes should not be included until the IEEE standard has implemented a conforming change. It is the position of the SDT that addressing IEEE 1547 is beyond the scope of the SDT, as it is not referenced in PRC-024.

At least one commenter suggested the DGR SDT consider including the following sub-sections: 4.1 Functional Entities and 4.2 Facilities rather than using footnotes; however, using a footnote to revise applicability has been supported by NERC staff during modification of this standard. The SDT therefore believes the proposed modification is satisfactory and thus declines to incorporate the suggested modification.

At least one commenter recommended establishing another set of VSLs established exclusively for DGRs. The DGR SDT agrees that the magnitude of the reliability impact of an individual DGR unit with non-compliant settings should be addressed; however, it is the position of the DGR SDT that this issue

is better addressed during the compliance enforcement process. Further, risk assessments performed during RAI should address this issue. The DGR SDT believes the nature of the requirements of Requirements R1 and R2 lend themselves for a pass/fail VSL; therefore, designing a range of severity of non-compliance is inappropriate based on VSL guidelines.

At least one commenter requested that Measures M1 and M2 of the standard clearly state that evidence can be original design documents and no periodic testing or verification is required. The SDT does not see a need to specify what evidence is acceptable strictly for dispersed power producing resources. The SDT believes that the existing use of “evidence” is broad enough to capture the commenter’s intent.

At least one commenter stated that the changes to PRC-024-1(X) include the applicability of the standard to Bulk Power System equipment that is not BES equipment, and indicated that the BES definition should be modified to include non-BES equipment in the regulatory standards rather than particular standards. Similarly, one commenter suggested that the language “including any non-Bulk Electric System collection system equipment” should be omitted from the rationale for footnotes 2 and 4, because the BES definition serves to identify what facilities are or are not applicable to NERC standards.

Reliability standards may apply to specific equipment characteristics, which may include equipment not included through the BES definition. It is not in the DGR SDT’s scope of work to modify the definition of BES.

At least one commenter suggested that the language in the Rationale Box entitled Rationale for Footnotes 2 and 4 “...are set within the “no-trip zone” is confusing and should be revised. The DGR SDT provided clarifying language.

At least one commenter expressed concern that the use of the terms “Protective Relaying” and “Protective Relay” in Requirements R1 and R2 may introduce confusion in other standards that use the same or similar terms, since, although footnote 3 provides further information about the term, a definition of the terms is not provided in the standard or in the Glossary of Terms Used in NERC Reliability Standards. The terms “protective relaying” and “protective relay” are not capitalized, and are not defined terms as used in Requirements R1 and R2, nor are the terms capitalized or used as defined terms in footnote 3; therefore the use of the terms in this standard have no bearing on the use of the same or similar terms in other standards. The requirement language and footnote 3 address aspects of the standard that were in the previously approved version and not associated with the applicability of dispersed power producing resources, as such revisions to these items are not in the scope of the SDT DGR’s SAR to change.

At least one commenter expressed agreement with the revisions proposed in footnotes 4 and 6, but noted that frequency and voltage protective relays require coordination with other protective relays

implemented elsewhere on the BES, and expressed concern that PRC-001-1.1(~~xii~~) Part 3.1 is excluding coordination of protective relays for Inclusion I4 which contradicts footnotes 4 and 6. While PRC-001-1.1(~~xii~~) excludes coordination of new or changes to existing relays with the TOP and host BA, PRC-024 still requires that these relays be set respecting the “no-trip zone.” The SDT does not believe there is a contradiction as the PRC standards address different compliance aspects associated with these relays. Further, PRC-024 Requirement R4 requires the reporting of such relay settings to the TP and PC.

At least one commenter suggested revising the language of the footnotes to add “. . . (potentially including non-BES equipment). . .” Thank you for your comment. It is the SDT’s position that the language of the footnote as drafted is sufficiently clear and unambiguous.

At least one commenter agreed 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, the commenter expressed that the SDT should make use of a Facilities Applicability section 4.2 as is done in many NERC standards such as PRC-019-2 rather than using a footnote. The approach of utilizing the footnote to revise applicability has been supported by NERC staff members during modification of this standard. The SDT believes the proposed modification is satisfactory and thus declines to incorporate the suggested modification.

At least one commenter agreed that it is sensible to set the voltage and frequency ride-through settings consistently throughout a dispersed generation facility: however, the commenter expressed concern that a violation may be assessed if a single relay record is missing among the potentially thousands of relays that would be covered by PRC-024-~~21(x)~~. The commenter went on to note that they agree that the RAI initiative has established an environment where a more reasonable compliance approach will be the norm. How violations are processed by NERC compliance is not in the purview of the DGR SDT.

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process. If you feel there has been an error or omission, you can contact the Director of Standards, Valerie Agnew, at 404-446-2566 or at valerie.agnew@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.²

² The appeals process is in the Standard Processes Manual: http://www.nerc.com/comm/SC/Documents/Appendix_3A_StandardsProcessesManual.pdf

1. Do you agree with the revisions proposed in PRC-001-1.1(X) Requirement R3 part 3.1 to exclude the individual generating units of dispersed power producing resources identified through Inclusion I4 of the BES definition from this requirement? If not, please provide technical rationale for your disagreement, along with suggested language changes.15

2. Do you agree with the revisions proposed in the Facilities section of proposed PRC-019-2 to clarify that the standard is applicable to dispersed power producing resources identified through Inclusion I4 of the BES definition where voltage regulating control for the facility is performed solely at the individual resource? If not, please provide technical rationale for your disagreement, along with suggested language changes.19

3. Do you agree with the revisions proposed in PRC-024-1(X) to clarify (via footnotes 4 and 6) that Requirements R1 and R2 are applicable to both dispersed power producing resources identified through Inclusion I4 of the BES definition, as well as any aggregating equipment (potentially including non-BES equipment) from the individual resource up to the point of interconnection? If not, please provide technical rationale for your disagreement, along with suggested language changes.23

4. Do you have any additional comments to assist the DGR SDT in further developing its recommendations?27

The Industry Segments are:

- 1 — Transmission Owners
- 2 — RTOs, ISOs
- 3 — Load-serving Entities
- 4 — Transmission-dependent Utilities
- 5 — Electric Generators
- 6 — Electricity Brokers, Aggregators, and Marketers
- 7 — Large Electricity End Users
- 8 — Small Electricity End Users
- 9 — Federal, State, Provincial Regulatory or other Government Entities
- 10 — Regional Reliability Organizations, Regional Entities

Group/Individual		Commenter	Organization	Registered Ballot Body Segment																																																	
				1	2	3	4	5	6	7	8	9	10																																								
1.	Group	Kristie Cocco	Arizona Public Service Company			X		X	X																																												
N/A																																																					
2.	Group	Guy Zito	Northeast Power Coordinating Council										X																																								
<table border="1"> <thead> <tr> <th></th> <th>Additional Member</th> <th>Additional Organization</th> <th>Region</th> <th>Segment Selection</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Alan Adamson</td> <td>New York State Reliability Council, LLC</td> <td>NPCC</td> <td>10</td> </tr> <tr> <td>2.</td> <td>David Burke</td> <td>Orange and Rockland Utilities Inc.</td> <td>NPCC</td> <td>3</td> </tr> <tr> <td>3.</td> <td>Greg Campoli</td> <td>New York Independent System Operator</td> <td>NPCC</td> <td>2</td> </tr> <tr> <td>4.</td> <td>Sylvain Clermont</td> <td>Hydro-Quebec TransEnergie</td> <td>NPCC</td> <td>1</td> </tr> <tr> <td>5.</td> <td>Kelly Dash</td> <td>Consolidated Edison Co. of New York, Inc.</td> <td>NPCC</td> <td>1</td> </tr> <tr> <td>6.</td> <td>Gerry Dunbar</td> <td>Northeast Power Coordinating Council</td> <td>NPCC</td> <td>10</td> </tr> <tr> <td>7.</td> <td>Kathleen Goodman</td> <td>ISO - New England</td> <td>NPCC</td> <td>2</td> </tr> </tbody> </table>															Additional Member	Additional Organization	Region	Segment Selection	1.	Alan Adamson	New York State Reliability Council, LLC	NPCC	10	2.	David Burke	Orange and Rockland Utilities Inc.	NPCC	3	3.	Greg Campoli	New York Independent System Operator	NPCC	2	4.	Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1	5.	Kelly Dash	Consolidated Edison Co. of New York, Inc.	NPCC	1	6.	Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10	7.	Kathleen Goodman	ISO - New England	NPCC	2
	Additional Member	Additional Organization	Region	Segment Selection																																																	
1.	Alan Adamson	New York State Reliability Council, LLC	NPCC	10																																																	
2.	David Burke	Orange and Rockland Utilities Inc.	NPCC	3																																																	
3.	Greg Campoli	New York Independent System Operator	NPCC	2																																																	
4.	Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1																																																	
5.	Kelly Dash	Consolidated Edison Co. of New York, Inc.	NPCC	1																																																	
6.	Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10																																																	
7.	Kathleen Goodman	ISO - New England	NPCC	2																																																	

Group/Individual	Commenter	Organization	Registered Ballot Body Segment																	
			1	2	3	4	5	6	7	8	9	10								
8. Michael Jones	National Grid	NPCC	1																	
9. Mark Kenny	Northeast Utilities	NPCC	1																	
10. Helen Lainis	Independent Electricity Suystem Operator	NPCC	2																	
11. Alan MacNaughton	New Brunswick Power Corporation	NPCC	9																	
12. Bruce Metruck	New York Power Authority	NPCC	6																	
13. Peter Yost	Consolidated Edison Co. of New York, Inc.	NPCC	3																	
14. Ben Wu	Orange and Rockland Utilities Inc.	NPCC	1																	
15. Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10																	
16. Robert Pellegrini	The United Illuminating Company	NPCC	1																	
17. Si Truc Phan	Hydro-Quebec TransEnergie	NPCC	1																	
18. David Ramkalawan	Ontario Power Generation, Inc.	NPCC	5																	
19. Brian Robinson	Utility Services	NPCC	8																	
20. Ayesha Sabouba	Hydro One Networks Inc.	NPCC	1																	
21. Brian Shanahan	National Grid	NPCC	1																	
22. Wayne Sipperly	New York Power Authority	NPCC	5																	
23. Silvia Parada Mitchell	NextEra Energy, LLC	NPCC	5																	
3.	Group	Connie Low	Dominion	X		X		X	X											
	Additional Member	Additional Organization	Region	Segment Selection																
1.	Randi Heise	NERC Compliance Policy	NPCC	5																
2.	Louis Slade	NERC Compliance Policy	SERC	1, 3, 5, 6																
3.	Larry Nash	Electric Transmission	SERC																	
4.	Chip Humphrey	Power Generation Compliance	NPCC	5																
5.	Louis Slade	NERC Compliance Policy	RFC	5, 6																
4.	Group	Joe DePoorter	MRO NERC Standards Review Forum	X	X	X	X	X	X											
	Additional Member	Additional Organization	Region	Segment Selection																
1.	Amy Casucelli	Xcel Energy	MRO	1, 3, 5, 6																
2.	Chuck Wicklund	Otter Tail Power Company	MRO	1, 3, 5																
3.	Dan Inman	Minnkota Power Cooperative, Inc.	MRO	1, 2, 5, 6																
4.	Dave Rudolph	Basin Electric Power Cooperative	MRO	1, 3, 5, 6																
5.	Kayleigh Wilkerson	Lincoln Electric System	MRO	1, 3, 5, 6																
6.	Jodi Jenson	Western Area Power Administration	MRO	1, 6																

Group/Individual	Commenter	Organization	Registered Ballot Body Segment																	
			1	2	3	4	5	6	7	8	9	10								
7.	Joseph DePoorter	Madison Gas & Electric	MRO	3, 4, 5, 6																
8.	Ken Goldsmith	Alliant Energy	MRO	4																
9.	Mahmood Safi	Omaha Public Utility District	MRO	1, 3, 5, 6																
10.	Marie Knox	Midwest ISO Inc.	MRO	2																
11.	Mike Brytowski	Great River Energy	MRO	1, 3, 5, 6																
12.	Randi Nyholm	Minnesota Power	MRO	1, 5																
13.	Scott Nickels	Rochester Public Utilities	MRO	4																
14.	Terry Harbour	MidAmerican Energy Company	MRO	1, 3, 5, 6																
15.	Tom Breene	Wisconsin Public Service Corporation	MRO	3, 4, 5, 6																
16.	Tony Eddleman	Nebraska Public Power District	MRO	1, 3, 5																
5.	Group	Dianne Gordon	Corporate Compliance		X		X		X											
N/A																				
6.	Group	Sandra Shaffer	PacifiCorp							X										
N/A																				
7.	Group	David Greene	SERC PCS																	X
Additional Member Additional Organization Region Segment Selection																				
1.	John Miller	GTC	SERC	1																
2.	Paul Nauert	Ameren	SERC	1, 3																
3.	Greg Davis	GTC	SERC	1																
4.	James Evans	SCE&G	SERC	1, 3, 5, 6																
5.	Steve Edwards	Dominion	SERC	1, 3, 6																
6.	George Pitts	TVA	SERC	1, 3, 5, 6																
8.	Group	Jason Marshall	ACES Standards Collaborators											X						
Additional Member Additional Organization Region Segment Selection																				
1.	Bob Solomon	Hoosier Energy	RFC	1																
2.	Paul Jackson	Buckeye Power	RFC	3, 4, 5																
3.	Scott Brame	North Carolina Electric Membership Corporation	SERC	3, 4, 5																
4.	Ginger Mercier	Prairie Power	SERC	3																
5.	Ellen Watkins	Sunflower Electric Power Corporation	SPP	1																
6.	Chip Koloini	Golden Spread Electric Cooperative	ERCOT	3, 5																

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
9.	Group	Shannon V. Mickens	SPP Standards Review Group		X								
Additional Member		Additional Organization	Region	Segment Selection									
1.	john falsey	Invenergy LLC	NA - Not Applicable	NA									
2.	Stephanie Johnson	Westar Energy, Inc.	SPP	1, 3, 5, 6									
3.	Ellen Watkins	Sunflower Electric Power Corporation	SPP	1									
4.	Luis Zaragoza	Sunflower Electric Power Corporation	SPP	1									
5.	James Nail	City of Independence, Missouri	SPP	3, 5									
6.	Jonathan Hayes	Southwest Power Pool	SPP	2									
7.	Robert Rhodes	Southwest Power Pool	SPP	2									
8.	Shannon Mickens	Southwest Power Pool	SPP	2									
10.	Group	Andrea Jessup	Bonneville Power Administration	X		X		X	X				
Additional Member		Additional Organization	Region	Segment Selection									
1.	Steve Enyeart	Customer Service Engineering	WECC	1									
11.	Group	Doug Hohlbaugh	FirstEnergy	X		X	X	X	X				
Additional Member		Additional Organization	Region	Segment Selection									
1.	Bill Smith	FE - RBB - Seg 1	RFC	1									
2.	Rich Hoag	FE - RBB - Seg 3	RFC	3									
3.	Doug Hohlbaugh	FE - RBB - Seg 4	RFC	4									
4.	Ken Dresner	FE - RBB - Seg 5	RFC	5									
5.	Kevin Querry	FE - RBB - Seg 6	RFC	6									
6.	Phil Bowers	FE - TO SME	RFC	1									
7.	Bill Duge	FE - GO SME	RFC	5									
8.	Rusty Loy	FE - GO SME	RFC	5									
9.	Steve Wittenauer	FE - TO SME	RFC	1									
12.	Group	Kathleen Black	DTE Electric			X	X	X					
Additional Member		Additional Organization	Region	Segment Selection									
1.	Kent Kujala	NERC Compliance	RFC	3									
2.	Daniel Herring	NERC Training & Standards Development	RFC	4									
3.	Mark Stefaniak	Merchant Operations	RFC	5									
4.	Neil Kennings	Renewable Energy											

	Group/Individual	Commenter	Organization	Registered Ballot Body Segment										
				1	2	3	4	5	6	7	8	9	10	
5.	Barbara Scramlin	DO SOC												
13.	Individual	John Falsey	Invenergy LLC					X						
14.	Individual	John Falsey	Invenergy LLC					X						
15.	Individual	Barbara Kedrowski	Wisconsin Electric Power Company			X	X	X						
16.	Individual	David Jendras	Ameren	X		X		X	X					
17.	Individual	Maryclaire Yatsko	Seminole Electric Cooperative, Inc.	X		X	X	X	X					
18.	Individual	David Kiguel	David Kiguel								X			
19.	Individual	Thomas Foltz	American Electric Power	X		X		X	X					
20.	Individual	John Seelke	Public Service Enterprise Group	X		X		X	X					
21.	Individual	Michael Hill	Tacoma Public Utilities	X		X	X	X	X					
22.	Individual	Michelle R. D'Antuono	Ingleside Cogeneration LP					X						
23.	Individual	Larry Heckert	Alliant Energy				X							
24.	Individual	Venona Greaff	Occidental Chemical Corporation								X			
25.	Individual	Jamison Cawley	Nebraska Public Power District	X		X		X						

If you support the comments submitted by another entity and would like to indicate you agree with their comments, please select "agree" below and enter the entity's name in the comment section (please provide the name of the organization, trade association, group, or committee, rather than the name of the individual submitter).

Summary Consideration:

Organization	Agree	Supporting Comments of "Entity Name"
Invenergy LLC	Agree	Southwest Power Pool
Ameren	Agree	We agree with and adopt the SERC PCS comments for Project 2014-01.
Occidental Chemical Corporation	Agree	Ingleside Cogeneration, LP

1. Do you agree with the revisions proposed in PRC-001-1.1(X) Requirement R3 part 3.1 to exclude the individual generating units of dispersed power producing resources identified through Inclusion I4 of the BES definition from this requirement? If not, please provide technical rationale for your disagreement, along with suggested language changes.

Summary Consideration:

Organization	Yes or No	Question 1 Comment
Northeast Power Coordinating Council	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.
ACES Standards Collaborators	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.

Organization	Yes or No	Question 1 Comment
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.
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.
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

Organization	Yes or No	Question 1 Comment
		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.
Arizona Public Service Company	Yes	
Dominion	Yes	
MRO NERC Standards Review Forum	Yes	
Corporate Compliance	Yes	
PacifiCorp	Yes	
SERC PCS	Yes	
SPP Standards Review Group	Yes	
Bonneville Power Administration	Yes	
FirstEnergy	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.
DTE Electric	Yes	

Organization	Yes or No	Question 1 Comment
Wisconsin Electric Power Company	Yes	
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.
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)."
Tacoma Public Utilities	Yes	
Alliant Energy	Yes	
Nebraska Public Power District	Yes	
Invenergy LLC		

2. Do you agree with the revisions proposed in the Facilities section of proposed PRC-019-2 to clarify that the standard is applicable to dispersed power producing resources identified through Inclusion I4 of the BES definition where voltage regulating control for the facility is performed solely at the individual resource? If not, please provide technical rationale for your disagreement, along with suggested language changes.

Summary Consideration:

Organization	Yes or No	Question 2 Comment
Arizona Public Service Company	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.
Dominion	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."
ACES Standards Collaborators	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

Organization	Yes or No	Question 2 Comment
		<p>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.</p>
<p>DTE Electric </p>	<p>No</p>	<p>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.</p>
<p>Ingleside Cogeneration LP</p>	<p>No</p>	<p>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.</p>
<p>Northeast Power Coordinating Council</p>	<p>Yes</p>	
<p>MRO NERC Standards Review Forum</p>	<p>Yes</p>	

Organization	Yes or No	Question 2 Comment
Corporate Compliance	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.
PacifiCorp	Yes	
SERC PCS	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"
SPP Standards Review Group	Yes	
Bonneville Power Administration	Yes	
FirstEnergy	Yes	See FE comments to Question 4.
Wisconsin Electric Power Company	Yes	
Seminole Electric Cooperative, Inc.	Yes	
David Kiguel	Yes	
American Electric Power	Yes	

Organization	Yes or No	Question 2 Comment
Public Service Enterprise Group	Yes	
Tacoma Public Utilities	Yes	
Alliant Energy	Yes	
Nebraska Public Power District	Yes	

3. Do you agree with the revisions proposed in PRC-024-1(X) to clarify (via footnotes 4 and 6) that Requirements R1 and R2 are applicable to both dispersed power producing resources identified through Inclusion I4 of the BES definition, as well as any aggregating equipment (potentially including non-BES equipment) from the individual resource up to the point of interconnection? If not, please provide technical rationale for your disagreement, along with suggested language changes.

Summary Consideration:

Organization	Yes or No	Question 3 Comment
Dominion	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.
MRO NERC Standards Review Forum	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.
DTE Electric	No	Please see our comment for Question 2.
Wisconsin Electric Power Company	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

Organization	Yes or No	Question 3 Comment
		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.
Tacoma Public Utilities	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?
Alliant Energy	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?).
Nebraska Public Power District	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

Organization	Yes or No	Question 3 Comment
		standards. We feel this adds back to the confusion that was to be avoided with the revised BES Definition.
Arizona Public Service Company	Yes	
Northeast Power Coordinating Council	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.
Corporate Compliance	Yes	Footnotes might be more clear if the language "... (potentially including non-BES equipment)..." were added.
PacifiCorp	Yes	
SERC PCS	Yes	
ACES Standards Collaborators	Yes	
SPP Standards Review Group	Yes	
Bonneville Power Administration	Yes	
FirstEnergy	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

Organization	Yes or No	Question 3 Comment
		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.
Seminole Electric Cooperative, Inc.	Yes	
David Kiguel	Yes	
American Electric Power	Yes	
Public Service Enterprise Group	Yes	
Ingleside Cogeneration LP	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.

4. Do you have any additional comments to assist the DGR SDT in further developing its recommendations?

Summary Consideration:

Organization	Yes or No	Question 4 Comment
Arizona Public Service Company	No	
MRO NERC Standards Review Forum	No	
Corporate Compliance	No	
PacifiCorp	No	
SERC PCS	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.
ACES Standards Collaborators	No	Thank you for the opportunity to comment.
Bonneville Power Administration	No	
DTE Electric	No	No comment.
Wisconsin Electric Power Company	No	

Organization	Yes or No	Question 4 Comment
David Kiguel	No	
Public Service Enterprise Group	No	
Tacoma Public Utilities	No	
Ingleside Cogeneration LP	No	
Alliant Energy	No	
Nebraska Public Power District	No	
Northeast Power Coordinating Council	Yes	<p>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"..."</p>
Dominion	Yes	<p>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</p>

Organization	Yes or No	Question 4 Comment
SPP Standards Review Group	Yes	<p>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.</p>
FirstEnergy	Yes	<p>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</p>

Organization	Yes or No	Question 4 Comment
		<p>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:</p> <p>4 Applicability</p> <p>4.1 Functional Entities</p> <p>4.1.1 Balancing Authorities</p> <p>4.1.2 Transmission Operators</p> <p>4.1.3 Generator Operators</p> <p>4.2 Facilities</p> <p>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.</p>
Seminole Electric Cooperative, Inc.	Yes	
American Electric Power	Yes	<p>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?</p>

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”

END OF REPORT