

Consideration of Comments

Project 2014-01 Standards Applicability for Dispersed Generation Resources
Recommended Applicability Changes to PRC-004

The Project 2014-01 Standards Applicability for Dispersed Generation Resources (DGR) standards drafting team (DGR SDT)¹ thanks all commenters who submitted comments on the standard. The DGR SDT's recommended changes to the applicability of the standard were posted for a 45-day comment period from September 5, 2014 through October 22, 2014. Stakeholders were asked to provide feedback on the standard and associated documents through an electronic comment form. There were 24 sets of comments, including comments from approximately 77 different entities from approximately 55 companies representing all 10 Industry Segments as shown in the table on the following pages.

Please note that NERC has instituted a new standards numbering convention to account for concurrent changes in draft standards. Specifically, the DGR SDT developed recommended changes to PRC-004 in concert with substantive changes made by other SDTs. As a result, the DGR SDT used an "X" suffix designation to indicate that the standard version number would be changed to the appropriate version number once the standard is filed at the Federal Energy Regulatory Commission (FERC) for consideration. However, the standards numbering convention now in effect has resulted in the following changes to the DGR versions of the PRC-004 standard:

Obsolete Version	Current Version
PRC-004-2.1a(X)	PRC-004-2.1(i)a
PRC-004-3(X)	PRC-004-4

To avoid confusion the DGR SDT has preserved the obsolete versions of the PRC-004 recommended changes for the purpose of responding to comments here. Moving forward this project will adopt the revised version numbering to comply with the standards numbering convention.

All comments submitted may be reviewed in their original format on the standard's project page.

This document contains the DGR SDT's 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

¹ The terms "dispersed generation resources" and "dispersed power producing resources" are used interchangeably.



SDT's recommendations on the standard, 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 overwhelming agrees with the DGR SDT's recommendations to make applicability changes to PRC-004 to account for the unique characteristics of DGRs in the standard. However, there are some disagreements among stakeholders and typographical errors contained in and illuminated by industry comments. The DGR SDT has carefully reviewed and considered each stakeholder comment and has revised its recommendations where suggested changes are consistent with DGR SDT intent and industry consensus. 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 requested that the red-lined version of the posted standard contain only red-lined text to those changes made by the DGR SDT. The red-lined version of the standard that will be posted for final ballot will consist of red-lined text limited to those changes made by the DGR SDT since the last posted version.

At least one commenter made inquiries related to the format of the standard. The DGR SDT notes that as standards are revised, they will be updated to the most current standard format.

3. PRC-004

At least one commenter suggested that Requirement R2 and Requirement R3 should add "in response to electrical quantities." The DGR SDT notes that relays that respond to "electrical quantities" is included in the definition of Protection System as defined by the NERC Glossary of Terms; therefore, the DGR SDT elects to retain the language as drafted to avoid redundancy that would result from adding the suggested language.

At least one commenter believes that in Requirements R2 and R3 of PRC-004-2.1a(X) and section 4.2.1.3 of PRC-004-4, "75 MVA" should be changed to "20 MVA" to make it comparable to I2 generators. The commenter believes that although the change to 20 MVA would have this standard

apply to non-BES assets, many standards do likewise. The commenter notes that "Protection Systems," which are the subject of this standard, are non-BES. As written, according to the commenter, a reliability gap would be created between I4 generators and I2 generators. The commenter believes that the proposed change violates Section 303 of the NERC Rules of Procedure, paragraph 1 that states: "Competition - A Reliability Standard shall not give any market participant an unfair competitive advantage."

As the DGR SDT has explained before, in order to provide consistent requirements for all generation, the DGR SDT believes it is necessary to assess applicability on individual units greater than 20 MVA and aggregate generation greater than 75 MVA, which are thresholds that have been explicitly recognized and approved by FERC as an appropriate threshold for these types of facilities consistent with the revised BES definition. The DGR SDT therefore does not believe it would be appropriate to use different aggregation thresholds absent a robust technical justification to do so. Moreover, the DGR SDT does not believe that a reliability gap is created, nor any unfair competitive advantages are given as a result.

At least one commenter notes that in Requirements R2 and R3, the words "or could have affected" were initially added but then deleted. The commenter believes those words should not have been deleted because the DGR PRC subteam had indicated that those words would be included. The deleted words addressed the commenter's concern it expressed during the comment period for the Dispersed Generation White Paper. Specifically, the commenter stated that it does not agree with limiting the analysis requirement to a trip of greater than 75 MVA because that only accounts for very large occurrences that could be unusual. The commenter believes that smaller occurrences, however, may predict an unusual large occurrence that could impact reliability, and that the deleted words were in fact included in the "Standards Applicability Guidelines" that were circulated for comment but were ultimately not issued.

As the DGR SDT has previously explained, it has considered all industry comments on this issue and determined that the use of "could have affected" is too vague, and that proving or disproving whether an event or a single misoperation could have affected 75 MVA would be overly burdensome. The use of "affected" was determined to still be broad enough to include misoperations that did not result in an actual trip of the associated generator, for instance the situation in which a protection system failed to trip 75 MVA of nameplate generation when a trip should have occurred. Note that the proposed language revision does not refer to the actual generation of the site at the time of the event, but rather what the generators that experienced the misoperation(s) are capable of producing at nameplate rating. The DGR SDT believes that this addresses the concerns raised and therefore respectfully declines to adopt the commenter's suggestion.

At least one commenter suggested that the term "BES facilities" should be replaced with the defined term "Facilities." By definition Facilities would be limited to the BES and would appear to constitute the same meaning that is conveyed by "BES facilities." The DGR SDT agrees that this comment may



have merit and therefore is referring it to NERC for future consideration when the standard is reviewed in a future project.

Some commenters expressed agreement with limiting the scope of a misoperation investigation to those Protection Systems affiliated with 75+ MVA aggregation points located within a dispersed generation facility. The SDT drafted its recommendation with the understanding that generator owner obligations as required by the standard would only occur at individual power producing resources if the misoperation affects an aggregate nameplate rating of greater than 75 MVA.

At least one commenter agrees with the specific revisions concerning only the changes to distributed generation but does not agree with the ongoing revisions through Project 2010-05.1 that are included in this revision, such as the owner of the BES interrupting device being required to initiate review in all scenarios as opposed to the entity that initiated the interrupting device's action. Therefore, the commenter indicates that it intends to vote negative, as this revision includes language from Project 2010-05.1 that the commenter does not find agreeable.

The scope of the DGR SDT is to specifically address standards applicability to dispersed power producing resources identified under Inclusion I4 of the BES definition. Therefore, these comments will be provided to NERC staff and to the Project 2010-5.1 SDT to the extent it remains active on these issues, as the DGR SDT believes these issues should be addressed on a broader and technologyneutral scope.

At least one commenter indicated that the DGR SDT should clarify what they mean by "affected" by changing the word "affected" to "outaged." The use of the term "affected" instead of "outaged" was intended to address the situation in which a Protection System failed to trip a generator(s) and create an outage. This situation is also a "Misoperation" and would not be addressed by the use of "tripped" or "outaged." The SDT notes that the 75 MVA value refers to aggregate nameplate generation.

At least one commenter believes the standard should define dispersed power producing resource. The DGR SDT maintains that this issue is adequately addressed in the White Paper. The DGR SDT believes that the proposed language as it exists adequately describes the treatment of dispersed power producing resources, a position that is supported by clear industry consensus.

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. 1



1.	Do you agree with the revisions made in proposed PRC-004-2.1a(X) to clarify applicability of PRC-004-2.1a to dispersed power producing resources included in the BES through Inclusion I4 of the BES definition? If not, please provide technical rationale for your disagreement along with suggested language	
	changes.	11
2.	Do you agree with the revisions made in proposed PRC-004-4 to clarify applicability of PRC-004-3 to dispersed power producing resources included in the BES through Inclusion I4 of the BES definition? If not, please provide technical rationale for your disagreement along with suggested language	
	changes	14
3.	Do you have any additional comments to assist the DGR SDT in further developing its recommendations?	17



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

G	oup/Individual	Commenter		Organization			Registered Ballot Body Segment										
							1	2	3	4	5	6	7	8	9	10	
1.	Group	Guy Zito	Northeast Power Coordinating Council											Х			
	Additional Member	r Additional Organization		Region	Segment Selection												
1.	Alan Adamson	New York State Reliability Co	ouncil, LLC	NPCC	10												
2.	David Burke	Orange and Rockland Utilities Inc.		NPCC	3												
3.	Greg Campoli	New York Independent Syste	m Operator	NPCC	2												
4.	Sylvain Clermont	Hydro-Quebec TransEnergie		NPCC	1												
5.	Kelly Dash	Consolidated Edison Co, of N	lew York, Inc.	NPCC	1												
6.	Gerry Dunbar	Northeast Power Coordinatin	g Council	NPCC	10												
7.	Mike Garton	Dominion Resources Services, Inc.		NPCC	5												
8.	Brian Robinson	Utility Services		NPCC	8												
9.	Kathleen Goodman	ISO - New England		NPCC	2												
10.	Helen Lainis	Independent Electricity Syste	m Operator	NPCC	2												



Gr	oup/Individual	Commenter		0	rganizati	on				Regi	stere	d Ballo	ot Bod	y Segi	ment		
								1	2	3	4	5	6	7	8	9	10
11.	Michael Jones	National Grid		NPCC	1						I					ı	
12.	Mark Kenny	Northeast Utilities		NPCC	1												
13.	Alan MacNaughton	New Brunswick Power Corpo	ration	NPCC	9												
14.	Bruce Metruck	New York Power Authority		NPCC	6												
15.	Silvia Parada Mitche	II NextEra Energy, LLC		NPCC	5												
16.	Lee Pedowicz	Northeast Power Coordinatin	g Council	NPCC	10												
17.	Robert Pellegrini	The United Illuminating Com	oany	NPCC	1												
18.	Si Truc Phan	Hydro-Quebec TransEnergie		NPCC	1												
19.	David Ramkalawan	Ontario Power Generation, Ir	nc.	NPCC	5												
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.	Ben Wu	Orange and Rockland Utilitie	s Inc.	NPCC	1												
24.	Peter Yost	Consolidated Edison Co. of N	lew York,	Inc. NPCC	3												
2.	Group	Janet Smith	Arizon	a Public Se	rvice Co			Х		Х		Х	Х				
N/A	λ							•								•	
3.	Group	Kaleb Brimhall	Colora	do Springs	Utilities			Х		Х		Х	Х				
N/A	\																
4.	Group	Joe DePoorter	MRO N	IERC Stand	lards Rev	iew Forun	1	Х	Х	Х	Х	Х	Х				
	Additional Member	Additional Organization	Regio	n Segment :	Selection												
1.	Amy Casucelli	Xcel Energy	MRO	1, 3, 5, 6													
2.	Chuck Wicklund	Otter Tail Power	MRO	1, 3, 5													
3.	Dan Inman	Minnkota Power Cooperative	MRO	1, 3, 5, 6													
4.	Dave Rudolph	Basin Electric Power Coop	MRO	1, 3, 5, 6													
5.	Kayleigh Wilkerson	Lincoln Electric System	MRO	1, 3, 5, 6													
6.	Jodi Jensen	WAPA	MRO	1, 6													
7.	Ken Goldsmith	Alliant Energy	MRO	4													
8.	Mahmood Safi	Omaha Public Power District	MRO	1, 3, 5, 6													
9.	Marie Knox	MISO	MRO	2													
10.	Mike Brytowski	Great River Energy	MRO	1, 3, 5, 6													
	Randi Nyholm	Minnesota Power	MRO	1, 5													

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Gro	oup/Individual	Commenter		Org	anization				Regi	stere	d Ballo	ot Bod	y Segi	ment		
							1	2	3	4	5	6	7	8	9	10
12. 5	Scott Nickels	Rochester Public Utilities	MRO 4				•			•	•				•	•
13. 7	Terry Harbour	MidAmerican Energy	MRO 1, 3,	5, 6												
14. 7	Tom Breene	Wisconsin Public Service	MRO 3, 4,	5, 6												
15. 7	Γony Eddleman	Nebraska Public Utilities Distri	ct MRO 1, 3,	5												
5.	Group	Connie Lowe	Dominion				Х		Х		Х	Х				
Ad	dditional Member	Additional Organization Regi	on Segment Se	election												
1. Ra	andi Heise	NERC Compliance Policy SER	C 1, 3, 5, 6													
2. La	arry Nash	Electric Transmission SER	C 1, 3													
3. Lc	ouis Slade	NERC Compliance Policy RFC	5, 6													
4. M	ike Garton	NERC Compliance Policy NPC	C 5													
6.	Group	Kaleb Brimhall	Colorado Spi	rings Ut	ilities		Х		Х		Х	Х				
N/A		•														
7.	Group	Dianne Gordon	Puget Sound	Puget Sound Energy			Х		Х		Х					
N/A																
8.	Group	Jason Marshall	ACES Standa	rds Col	laborators							Х				
A	dditional Member	Additional Organiz	ation	Region	Segment Sele	ction										
1. CI	nip Koloini	Golden Spread Electric Cooper	ative, Inc.	SPP	3, 5											
2. Sc	cott Brame	North Carolina Electric Member	ship Corporation	SERC	3, 4, 5											
3. EI	len Watkins	Sunflower Electric Power Corpo	oration	SPP	1											
4. Bo	ob Solomon	Hoosier Energy Rural Electric C	Cooperative, Inc.	RFC	1											
9.	Group	Kathleen Black	DTE Electric	Co.					Х	Х	Х					
Ad	dditional Member	Additional Organization	on Regi	on Seg	ment Selection											
1. Ke	ent Kujala	NERC Compliance	RFC	3												
2. Da	aniel Herring	NERC Training & Standards De	evelopment RFC	4												
3. M	ark Stefaniak	Merchant Operations	RFC	5							_					
10.	Group	Shannon V. Mickens	SPP Standard	ds Revie	ew Group			Х								
A	dditional Member	Additional Organization	Region S	Segmen	t Selection											
1. St	ephanie Johnson	Westar Energy, Inc.	SPP	1, 3, 5, 6												
2. Bo	Jones	Westar Energy, Inc.	SPP 1	1, 3, 5, 6												

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Gro	oup/Individual	Commenter	Organization			Regi	stere	d Ballo	ot Bod	y Segi	ment		
				1	2	3	4	5	6	7	8	9	10
3. Ti	3. Tiffany Lake Westar Energy, Inc.		SPP 1, 3, 5, 6						ı				
4. Ja	ames Mizell	Westar Energy, Inc.	SPP 1, 3, 5, 6										
5. El	llen Watkins	Sunflower Electric Power Corp	oration SPP 1										
6. R	obert Rhodes	Southwest Power Pool	SPP 2										
7. SI	hannon Mickens	Southwest Power Pool	SPP 2		•	T		,	T	ı	ı	,	
11.	Individual	Heather Bowden	EDP Renewables North America LLC					Х					
12.	Individual	Thomas Foltz	American Electric Power	Х		Х		Х	Χ				
13.	Individual	Jonathan Meyer	Idaho Power	Х									
14.	Individual	John Merrell	Tacoma Power	Х		Х	Х	Х	Х				
15.			Ingleside Cogeneration LP/Occidental										
	Individual	Michelle D'Antuono	Energy Ventures Corp			Χ		Χ		Χ			
16.	Individual	Venona Greaff	Occidental Chemical Corporation							Х			
17.	Individual	Michael Moltane	ITC	Х									
18.	Individual	Sonya Green-Sumpter	South Carolina Electric & Gas	Х		Х		Х	Х				
19.	Individual	Jo-Anne Ross	Manitoba Hydro	Х		Х		Х	Х				
20.	Individual	John Seelke	Public Service Enterprise Group	Х		Х		Х	Х				
21.	Individual	Maryclaire Yatsko	Seminole Electric Cooperative, Inc.	Х		Х	Х	Х	Х				
22.	Individual	David Greyerbiehl	Consumers Energy Company			Х	Х	Х					
23.	Individual	Bill Temple	Northeast Utilities	Х									
24.	Individual	John Pearson/Matt Goldberg	ISO New England		Х								



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: The DGR SDT thanks all commenters for their comments and refers the reader to the summary response above.

Organization	Agree	Supporting Comments of "Entity Name"
Colorado Springs Utilities	Agree	Public Service Enterprise Group (PSEG)
Occidental Chemical Corporation	Agree	Ingleside Cogeneration, LP
South Carolina Electric & Gas	Agree	
Colorado Springs Utilities		Public Service Enterprise Group (PSEG)



1. Do you agree with the revisions made in proposed PRC-004-2.1a(X) to clarify applicability of PRC-004-2.1a to dispersed power producing resources included in the BES through Inclusion I4 of the BES definition? If not, please provide technical rationale for your disagreement along with suggested language changes.

Summary Consideration: The DGR SDT thanks all commenters for their comments and refers the reader to the summary response above.

Organization	Yes or No	Question 1 Comment
EDP Renewables North America LLC	No	Requirement 2 and Requirement 3 should add "in response to electrical quantities."
Public Service Enterprise Group No		The changes would create a reliability gap between I4 generators and I2 generators. It also violates Section 303 of the NERC Rules of Procedure, paragraph 1 that states: "Competition - A Reliability Standard shall not give any market participant an unfair competitive advantage." Presently, every generator at a site that exceeds 75 MVA is subject to the standard. All I2 generators, regardless of size, would remain subject to the standard, but all I4 generators would be exempt except at the point where their output aggregates to greater than 75 MVA.
		In addition, individual I2 greater than 20 MVA are subject to the standard, regardless of the aggregate output of generation at a common point of connection. We suggest changes to the added bullet in R2 and R3 to make the standard comparable for all resources (added language is CAPITALIZED):"
		For Misoperations occurring on the Protection Systems of individual [delete "dispersed power producing resources"] GENERATORS identified under INCLUSION I2 AND Inclusion I4 of the BES definition where the

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Organization	Yes or No	Question 1 Comment
		Misoperations affected an aggregate nameplate rating of less than or equal to [delete "75"] 20 MVA of BES facilities, this requirement does not apply."
ISO New England	No	In R2 and R3, the words "or could have affected" were initially added but then they were deleted. Those words should not have been deleted or similar replacement language should be added. The PRC subteam had indicated to us that those words would be included. The deleted words addressed the concern we expressed during the comment period for the Dispersed Generation White Paper.
		Specifically, we stated that we do not agree with limiting the analysis requirement to a trip of greater than 75 MVA because that only accounts for very large occurrences that could be unusual. Smaller occurrences, however, may predict an unusual large occurrence that could impact reliability. Many of these wind turbine installations at different sites all use the same equipment and during a major disturbance reliability may be reduced by misoperations.
		The deleted words were in fact included in the "Standards Applicability Guidelines" that were circulated for comment but were ultimately not issued. Wording that indicates when misoperations occur on relays that are used in applications that ultimately represent over 75 MVA should be added back in.
Northeast Power Coordinating Council	Yes	
Arizona Public Service Co	Yes	
MRO NERC Standards Review Forum	Yes	
Dominion	Yes	



Organization	Yes or No	Question 1 Comment
Puget Sound Energy	Yes	
ACES Standards Collaborators	Yes	We agree with the changes. However, one additional change is necessary. "BES facilities" should be changed to the defined term "Facilities." By definition Facilities would be limited to the BES and would appear to constitute the same meaning that is conveyed by "BES facilities."
DTE Electric Co.	Yes	
SPP Standards Review Group	Yes	
American Electric Power	Yes	
Idaho Power	Yes	
Tacoma Power	Yes	
Ingleside Cogeneration LP/Occidental Energy Ventures Corp	Yes	Occidental Energy Ventures Corp. (OEVC) agrees that the scope of a Misoperation investigation should be limited to those Protection Systems affiliated with 75+ MVA aggregation points located within a dispersed generation facility. It makes no sense requiring a compulsory NERC-compliant investigation and report down to the windmill or solar panel level - unless somehow the aggregation point is affected. This is unlikely to be the case most of the time, and if every minimal incident is subject to PRC-004-2.1a(X), both the relay owner and CEA community could be overwhelmed with the volume of work required. This serves no useful reliability purpose.
Manitoba Hydro	Yes	
Seminole Electric Cooperative, Inc.	Yes	



Organization	Yes or No	Question 1 Comment
Consumers Energy Company	Yes	
Northeast Utilities	Yes	

^{2.} Do you agree with the revisions made in proposed PRC-004-4 to clarify applicability of PRC-004-3 to dispersed power producing resources included in the BES through Inclusion I4 of the BES definition? If not, please provide technical rationale for your disagreement along with suggested language changes

Summary Consideration: The DGR SDT thanks all commenters for their comments and refers the reader to the summary response above.

Organization	Yes or No	Question 2 Comment
EDP Renewables North America LLC	No	Applicability (4.2.1.5) should include "in response to electrical quantities."
Public Service Enterprise Group	No	For the same reasons described in Q1 above, part 4.2.1.5 should have similar changes applied.
Seminole Electric Cooperative, Inc.	No	Seminole agrees with the specific revisions concerning only the changes to distributed generation, however, Seminole does not agree with the ongoing revisions through Project 2010-05.1 that are included in this revision, such as the owner of the BES interrupting device being required to initiate review in all scenarios as opposed to the entity that initiated the interrupting device's action. Therefore, Seminole must vote negative as this revision includes language from Project 2010-05.1 that Seminole does not find agreeable.



Organization	Yes or No	Question 2 Comment
ISO New England	No	See Question 1 response
Northeast Power Coordinating Council	Yes	
MRO NERC Standards Review Forum	Yes	
Dominion	Yes	
Puget Sound Energy	Yes	
ACES Standards Collaborators	Yes	When reviewing the red-line version of the standard comparing this version to the last posting, we can find no differences pertaining the portion of the standard dealing with dispersed generation resources. Comparing for changes would be much easier if all of the red-lines that do not pertain to this project were changed to black text especially considering PRC-004-3 was approved by the NERC Board of Trustees in their mid-August prior to the posting of this standard.
DTE Electric Co.	Yes	
SPP Standards Review Group	Yes	
American Electric Power	Yes	
Idaho Power	Yes	
Tacoma Power	Yes	



Organization	Yes or No	Question 2 Comment
Ingleside Cogeneration LP/Occidental Energy Ventures Corp	Yes	OEVC agrees that the scope of a Misoperation investigation should be limited to those Protection Systems affiliated with 75+ MVA aggregation points located within a dispersed generation facility. It makes no sense requiring a compulsory NERC-compliant investigation and report down to the windmill or solar panel level - unless somehow the aggregation point is affected. This is unlikely to be the case most of the time, and if every minimal incident is subject to PRC-004-3, both the relay owner and CEA community could be overwhelmed with the volume of work required. This serves no useful reliability purpose.
Manitoba Hydro	Yes	
Consumers Energy Company	Yes	
Northeast Utilities	Yes	



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

Summary Consideration: The DGR SDT thanks all commenters for their comments and refers the reader to the summary response above.

Organization	Yes or No	Question 3 Comment
Northeast Power Coordinating Council	No	
Dominion	No	
DTE Electric Co.	No	
EDP Renewables North America LLC	No	



Organization	Yes or No	Question 3 Comment
American Electric Power	No	
Idaho Power	No	
Tacoma Power	No	
Manitoba Hydro	No	
Seminole Electric Cooperative, Inc.	No	
Northeast Utilities	No	
ISO New England	No	
MRO NERC Standards Review Forum	Yes	
Puget Sound Energy	Yes	In the proposed Applications and Guidelines for PRC-004-4: The section "Composite Protection System - Breaker Failure Example" reads "An example of a correct operation of the breaker's Composite Protection System is when the breaker failure relaying tripped because the line relaying operated, but the breaker failed to clear the fault. The breaker failure relaying operated because of a failed trip coil. The failed trip coil caused a Misoperation of the line's Composite Protection System." This example is inconsistent with #1 of the new proposed Misoperation Definition (Failure to Trip - During Fault), which reads "A failure of a Composite Protection System to operate for a Fault condition for which it is designed. The failure of a Protection System component is not a Misoperation as long as the performance of the Composite Protection System is correct." The example given above is NOT a



Organization	Yes or No	Question 3 Comment
		Misoperation, because the Composite Protection System operated correctly even with a failed trip coil (from what we understand of what is written).
ACES Standards Collaborators	Yes	The SDT should clarify what is meant by "affected." Does this mean that amount of generation that was actually outaged as a result of the Misoperation? Or would this include an evaluation of the other potential Misoperations that could have occurred if the same conditions were experienced at other locations within the dispersed generation site? We believe that the answer should be the former rather than the latter. To make this clear, we suggest changing the word "affected" to "outaged" or, at least, providing an explanation in the technical/application guidelines section of the standard.
Ingleside Cogeneration LP/Occidental Energy Ventures Corp	Yes	OEVC is encouraged by the rapid progress that the DGR SDT has made in the development and approval of the first three priority standards. We appreciate the hard work and are hoping the project team will continue at the same rapid pace in the next grouping.
ITC	Yes	The Standard should define dispersed power producing resource. While in a practical sense this is a facility comprised of wind turbines or PV inverters, offering exclusions from Requirements based on an undefined criteria is not a good practice.
		R4 - ITC recommends removal of the sub-bullet under R4 excluding the generators identified through Inclusion I4. The exclusion using BES I4 is confusing and may conflict with existing standard VAR-001-4. A non-BES unit or several non-BES units combined together could have an impact on the BES and thus removing the generators from VAR-002-4 R4 solely based on Inclusion I4 may be affect reliability. Per VAR-001-4 R4, the TOP is required to specify criteria that will exempt generators from following a voltage or reactive power schedule and associated notification requirements. Therefore, ITC recommends that VAR-002-3 R4 should be reworded as "Unless exempted by the Transmission Operator, each Generator Operator shall notify its associated Transmission Operator within 30 minutes of becoming aware of



Organization	Yes or No	Question 3 Comment
		a change in reactive capability due to factors other than a status change described in Requirement 3". The TOP can determine what notifications are necessary and be more specific depending on the needs of the system or individual facility. For example, a TOP exemption criteria may contain: "Dispersed power producing facilities are exempt from reactive capability change notifications less than 10% of the total aggregate lagging reactive capability as measured at the POI at nominal voltage". TOPs typically will not want to receive individual turbine outage notifications; however, there may be instances where a dispersed power producing resource could lose an individual unit that may affect reliable operations (i.e. large individual units, near nuclear facility). In addition, the sub-bullet language in VAR-002-4 may be interpreted such that generators not in BES are exempt from reactive capability notifications and, in turn, exempt from following schedules which may be in conflict with VAR-001-4 and potentially impact the reliability of the BES. VAR-001-4 requires the TOP to determine the exemption criteria for generators and ITC recommends that VAR-002-4 be consistent with this practice as the TOP may require non-BES generators to follow a voltage or reactive power schedule based on the collective impact to the BES.
Public Service Enterprise Group	Yes	The SDT has not provided a technical rationale for its proposed changes but instead has hidden behind the I4 definition. As the SDT well knows, NERC standards may apply to Elements that are not included in the BES definition.
Consumers Energy Company	Yes	For this exclusion, the standard formatting was changed from the previous standards and revisions. Was this intentional and why? If so, are the other standards going to be revised similarly.
SPP Standards Review Group		We would like to thank the drafting team for taking into consideration our suggestions in reference to replacing the term 'BPS' with 'BES' in both(PRC-004-2.1a(X) and PRC-004-4) as well as including the new term 'Composite Protection



Organization	Yes or No	Question 3 Comment
		System' in PRC-004-4. We felt these suggestions would help maintain consistency with the current documentation and the BES Definition.

END OF REPORT