

Consideration of Comments Project 2006-06 Reliability Coordination

The Reliability Coordination Standard Drafting Team (RCSDT) thanks all commenters who submitted comments on the successive posting of the COM-01-2 reliability standard for Project 2006-06—Reliability Coordination. These standards were posted for a 30-day public comment period from June 7, 2012 through July 6, 2012. Stakeholders were asked to provide feedback on the standards and associated documents through a special electronic comment form. There were 41 sets of comments, including comments from approximately 136 different people from approximately 90 companies representing 9 of the 10 Industry Segments as shown in the table on the following pages.

Summary Consideration

The RCSDT received comments from stakeholders, where a majority of those comments were focused on compliance elements of the standards, various typographical errors, and other minor ambiguities. The RCSDT believes it has been responsive to the many comments and has either provided adequate explanation, where applicable, as well as incorporating the suggested clarifications or corrections. There was one minority issue raised by several commenters which the RCSDT addressed, but did not make a revision to the standard. These commenters suggested adding a time threshold to Requirement R11 that would trigger the Distribution Provider and Generation Operator to consult with its Balancing Authority and Transmission Operator after losing its Interpersonal Communication capability for a defined period. The RCSDT believed this would be unnecessarily prescriptive and notes that each entity along with its affected neighbors, should, by procedures, identify what constitutes the detection of a failure of its capability and the acceptable time threshold for restoration. Revisions made to the standards are summarized in the following sections by standard.

COM-001-2

In the last posting and successive ballot, the standard received approval from 72.16% of the ballot body and fewer overall comments from previous postings. The RCSDT made minor, non-substantive changes to the standard based on these comments. The RCSDT believes it has addressed stakeholder comments and concerns in such a way that the standard is improved and meets the expectations expressed in comments for reliability and industry approval. Now that the standard has achieved industry consensus, this standard will advance to a recirculation ballot.

Purpose: No change.

Effective Date: No change.



Requirements: Changes were minor. The RCSDT for Requirements R1, R3, R5, R7, R8, and R11 changed the term "experiences" in the phrase "experiences a failure" to "detects." This more appropriately aligns with the performance expectation that an entity must detect a failure first which would start the threshold for performance. The change maintains the intent while adding clarity and measurability.

The RCSDT also notes a minor change in Requirement R5, Part 5.5 and Requirement R6, Part 6.3 concerning "adjacent." The team, during the revisions of draft 6, inadvertently changed "Adjacent" to a lower case when making revisions to the two parts that began with capitalized term. Commenters regarding draft 5 were concerned that the capitalized term would imply a NERC Glossary term, such as, "Adjacent Reliability Coordinator," and cause confusion since there was no such term. The RCSDT recognizes that the glossary term should have remained, in the case of Parts 5.5 and 6.3, "Adjacent Balancing Authority."

One commenter argued that the Violation Risk Factor (VRF) for Requirement R7 should be Medium, not High. The RCSDT considered this argument and concluded the change had merit based on the risk a Distribution Provider has in the scope of communications. Furthermore, the RCSDT also considered the VRF with regard to the Generator Operator in Requirement R8, but concluded the VRF should remain High because the Generator Operator may have a role as a blackstart resource in a Reliability Coordinator's restoration plan.

Other commenters raised a concern that the relationship in Requirement R10 between the functions and the requirements listed were not clear. The suggested solution was to use the phrase, "as applicable"; however, the RCSDT opted to use the term "respectively" to more appropriately make the distinction between the functions and the listed requirements (i.e., the Reliability Coordinator (R1), Transmission Operator (R3), and Balancing Authority (R5)). This change was also applied to Measure M11.

Measures: One commenter recognized an error in Measure M3. The conjunction between asynchronously and synchronously should have been "or," not "and" to accurately reflect the situation in Requirement R3, Parts 3.5 and 3.6. The extra word "that" was removed from Measure M7, as it was a typographical error. Measure M10 was updated to include the word "respectively" to coincide with the revision to Requirement R10. The Measure M11 was revised to reflect the changes in Requirement R11 to change the word "experiences" to "detects." Last, the colon in Measures M9, M10, and M11 was moved to the appropriate location in each sentence.

Compliance, Compliance Enforcement Authority: No change.



Compliance, Data Retention: A commenter raised the question about the Measures allowing voice recordings, but requiring an entity to maintain this evidence for 12 calendar months. Standard drafting guidelines recommend that voice recordings be retained for 90 calendar days. The RCSDT agreed that 90 calendar days is the recommended practice and modified each of the data retention bulleted items to reflect the specific case of voice recordings.

Violation Severity Levels: Several of the Violation Severity Levels (VSL) required updating to account for the term changes in the requirements and the correction of certain typographical errors. For the word change from "experiences" to "detects," the following VSLs were revised; R1, R3, R5, R7, R8, and R11. The Requirement R3 VSL had the "Reliability Coordinator" listed where it should have been the "Transmission Operator." Likewise, the same error appeared in the Requirement R5 VSL where "Reliability Coordinator" should have been "Balancing Authority." A commenter discovered a minor conjunction error in the Requirement R9 VSL in the listing of functional entities. The conjunction was changed from "and" to "or" to accurately reflect the construction of the VSLs. The same issue was revealed in the Requirement R10 VSL and was corrected, as well as removing the additional "identified" that was not needed.

Additional Information

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

http://www.nerc.com/filez/standards/Reliability Coordination Project 2006-6.html

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 Vice President and Director of Standards, Mark Lauby, at 404-446-2560 or at mark.lauby@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process. ¹

¹ The appeals process is in the Standard Processes Manual: http://www.nerc.com/files/Appendix 3A StandardsProcessesManual 20120131.pdf



Index to Questions, Comments, and Responses

1.	The RCSDT has revised the parts of Requirements R1, R2, R3, R4, R5, and R6 of COM-001-2 that began only with "Adjacent" to begin with "Each adjacent" to avoid the appearance of creating a defined glossary phrase. Do you agree with the changes? If not, please explain in the comment area below
2.	The RCSDT has revised parts of two requirements (Parts 3.5 and 4.3) in COM-001-2 and added two additional parts (Parts 3.6 and 3.4) to address concerns about the phrase "synchronously connected within the same Interconnection." Do you agree these changes address concerns where entities might only be adjacent across an Interconnection for where connected by a Direct Current (DC) tie? If not, please explain in the comment area below
3.	The RCSDT made minor changes and reformatted the evidence examples in the Measures of COM-001-2 for greater clarity. Do you agree with these revisions? If not, please explain in the comment area below
4.	Do you have any other comments on COM-001-2, not expressed in questions above, for the RCSDT? 30



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

Gr	oup/Individual	Commenter		Organization			Regi	stered	d Ballo	ot Bod	y Segi	ment		
					1	2	3	4	5	6	7	8	9	10
1.	Group	Sam Ciccone		FirstEnergy	Х		Х	Х	Х	Х				
Δ	Additional Member	Additional Organization I	Regio	n Segment Selection	1			•	1	•				•
1. L	Raczkowski	FE I	RFC											
2. [). Hohbaugh	FE I	RFC											



Gı	roup/Individual	Commenter		Organiz	ation			Regi	stere	d Ballo	t Bod	y Seg	ment		
						1	2	3	4	5	6	7	8	9	10
2.	Group	Gerald Beckerle	SERC	OC Standards Rev	iew Group	Х		Х							
	Additional Member	Additional Organization	Region	Segment Selection		<u> </u>	I			I					<u>.l</u>
1.	Joe Riels	SMEPA	SERC	1, 3, 4, 5											
2.	Jake Miller	Dynegy	SERC	5											
3.	Stuart Goza	TVA	SERC	1, 3, 5, 6											
4.	Jim Case	Entergy	SERC	1, 3, 6											
5.	Larry Rodriquez	Entegra	SERC	6											
6.	Tim Hattaway	PowerSouth	SERC	1, 5											
7.	William Berry	ОМИ	SERC	3, 5											
8.	Raleigh Nobles	GA. System Operations	SERC	3											
9.	Tom Hanzlik	SCE&G	SERC	1, 3, 5, 6											
10.	Bill Thigpen	PowerSouth	SERC	1, 5											
11.	Marie Knox	MISO	SERC	2											
12.	J.T. Wood	Southern	SERC	1, 5											
13.	Joel Wise	TVA	SERC	5, 6, 1, 3											
14.	Wayne Van Liere	LGE-KU	SERC	3											
15.	Mike Hardy	Southern	SERC	1, 5											



Gr	oup/Individual	Commenter		Orga	nization				Regi	stere	d Ball	ot Bo	dy Seg	men	t	
							1	2	3	4	5	6	7	8	9	10
16.	Andy Burch	Electric Energy, Inc.	SERC	5									<u> </u>			
17.	Scott Brame	NCEMC	SERC	1, 3, 4, 5												
18.	John Troha	SERC Reliability Corporation	SERC	10												
3.	Group	Chris Higgins	Bonr	neville Power Ad	ministration	Х			Х		Х	Х				
	Additional Member	er Additional Organization Ro	egion Se	egment Selection						1	1		1	1		
1.	Huy	Ngo W	ECC 1													
2.	Chris	Sanford W	ECC 1													
3.	Paul	Blake W	ECC 1													
4.	Group	Brenda Hampton	Lumi	inant								Х				
Add	litional Member A	dditional Organization	F	Region	Segment Selection	<u> </u>					1					<u>. I</u>
1.	M	like Laney Lumin	ant Gene	eration Company LL	C ERCOT 5											
5.	Group	Steve Rueckert	Wes	tern Electricity C	oordinating Council											Х
No a	additional meml	pers listed.											I			
6.	Group	Connie Lowe	Dom	inion		X			Х		Х	Х				
Α	 \dditional Member	Additional Organization Re	jion Seg	gment Selection												<u> </u>
1. N	/like Garton	MR	O 5, 6	3												



G	roup/Individual	Commenter		Organization			Regi	istere	d Ballo	ot Bod	y Seg	ment		
					1	2	3	4	5	6	7	8	9	10
2.	Louis Slade	RFC	5, 6		.		1	1					1	
3.	Randi Heise	NPCC	5, 6											
4.	Michael Crowley	SERC	1, 3, 5, 6											
7.	Group	Kent Kujala	Detroit Edison				Х	Х	Х					
	Additional Member	r Additional Organization Region	Segment Selec	ction										
1.	Jeffrey DePriest	RFC	3, 4, 5											
2.	Alexander Eizans	RFC	3, 4, 5											
3.	Barbara Holland	NPCC												
8.	Group	Robert Rhodes S	SPP Standards	Review Group		Х								
	Additional Member	Additional Organization	n Region	Segment Selection		<u> </u>	1			<u> </u>				
1.	Michelle Corley	Cleco Power	SPP	1, 3, 5										
2.	Bo Jones	Westar Energy	SPP	1, 3, 5, 6										
3.	Allen Klassen	Westar Energy	SPP	1, 3, 5, 6										
4.	Tiffany Lake	Westar Energy	SPP	1, 3, 5, 6										
5.	Julie Lux	Westar Energy	SPP	1, 3, 5, 6										
6.	Terri Pyle	Oklahoma Gas & Electric	SPP	1, 3, 5										
7.	Sean Simpson	Board of Public Utilities of Kansas	city, KS SPP	NA										



Gr	oup/Individual	Commenter		Orga	nization			Reg	istere	d Ball	ot Bod	ly Seg	ment		
						1	2	3	4	5	6	7	8	9	10
8. E	Bryan Taggart V	Vestar Energy		SPP 1, 3, 9	5, 6										
9.	Group	WILL SMITH	М	RO NSRF		Х	Х	Х	Х	Х	Х				
	Additional Member	Additional Organization	on Regior	Segment Selection		I						<u> </u>			
1.	MAHMOOD SAFI	OPPD	MRO	1, 3, 5, 6											
2.	CHUCK LAWRENCE	ATC	MRO	1											
3.	TOM WEBB	WPS	MRO	3, 4, 5, 6											
4.	JODI JENSON	WAPA	MRO	1, 6											
5.	KEN GOLDSMITH	ALTW	MRO	4											
6.	ALICE IRELAND	XCEL	MRO	1, 3, 5, 6											
7.	DAVE RUDOLPH	BEPC	MRO	1, 3, 5, 6											
8.	ERIC RUSKAMP	LES	MRO	1, 3, 5, 6											
9.	JOE DEPOORTER	MGE	MRO	3, 4, 5, 6											
10.	SCOTT NICKELS	RPU	MRO	4											
11.	TERRY HARBOUR	MEC	MRO	5, 6, 1, 3											
12.	MARIE KNOX	MISO	MRO	2											
13.	LEE KITTELSON	ОТР	MRO	1, 3, 5, 6											
14.	SCOTT BOS	MPW	MRO	1, 3, 5, 6											



Gı	oup/Individual	Commenter			0	rganization			Regi	stere	d Ball	ot Boo	dy Se	gmer	nt	
							1	2	3	4	5	6	7	8	9	10
15.	TONY EDDLEMAN	NPPD	MRO	1, 3, 5								1			·	
16.	MIKE BRYTOWSKI	GRE	MRO	1, 3, 5,	6											
17.	DAN INMAN	MPC	MRO	1, 3, 5,	6											
10.	Group	Guy Zito	N	lortheast	Power	Coordinating Council										Х
	Additional Member	Additional Orga	anizatio	on	Region	Segment Selection						1	1		1	1
1.	Alan Adamson	New York State Reliability	y Coun	cil, LLC	NPCC	10										
2.	Carmen Agavriloai	Independent Electricity S	ystem	Operator	NPCC	2										
3.	Greg Campoli	New York Independent S	ystem	Operator	NPCC	2										
4.	Sylvain Clermont	Hydro-Quebec TransEne	rgie		NPCC	1										
5.	Chris de Graffenried	Consolidated Edison Co.	of Nev	v York, Inc.	NPCC	1										
6.	Gerry Dunbar	Northeast Power Coordin	ating C	Council	NPCC	10										
7.	Mike Garton	Dominion Resources Ser	vices,	Inc.	NPCC	5										
8.	Peter Yost	Consolidated Edison Co.	of Nev	v York, Inc.	NPCC	3										
9.	Michael Jones	National Grid			NPCC	1										
10.	David Kiguel	Hydro One Networks Inc.			NPCC	1										
11.	Michael R. Lombardi	Northeast Utilities			NPCC	1										
12.	Randy MacDonald	New Brunswick Power Tr	ansmis	ssion	NPCC	9										



G	roup/Individual	Commenter		0	rganization			Regi	stere	d Ballo	ot Bod	y Segi	ment		
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13.	Bruce Metruck	New York Power Authority		NPCC	6					1					
14.	Silvia Parada Mitchel	I NextEra Energy, LLC	1	NPCC	5										
15.	Lee Pedowicz	Northeast Power Coordinatin	g Council	NPCC	10										
16.	Robert Pellegrini	The United Illuminating Com	pany	NPCC	1										
17.	Si-Truc Phan	Hydro-Quebec TransEnergie		NPCC	1										
18.	David Ramkalawan	Ontario Power Generation, Ir	nc.	NPCC	5										
19.	Brian Robinson	Utility Services		NPCC	8										
20.	Michael Schiavone	National Grid		NPCC	1										
21.	Wayne Sipperly	New York Power Authority		NPCC	5										
22.	Donald Weaver	New Brunswick System Ope	rator	NPCC	2										
23.	Ben Wu	Orange and Rockland Utilitie	s	NPCC	1										
11	Group	Jennifer Eckels	Colorado S	orings	Utilities	Х		Х		Х	Х				
	Additional Member A	Additional Organization Regi	on Segment S	Selectio	n										1
1.	Paul Morland	WEC	CC 1												
2.	Charles Morgan	WEC	CC 3												
3.	Lisa Rosintoski	WEC	CC 6												
12	Group	Jason Marshall	ACES Powe	r Mark	xeting Standards						Х				



G	roup/Individual	Commenter				Org	ganization					Regi	stere	d Balle	ot Boo	ly Seg	ment		
										1	2	3	4	5	6	7	8	9	10
				Collal	borator	S													
	Additional Member	Additional Organ	nization		Region	n Segm	ent Selection	on		I									
1.	Bill Hutchison	Southern Illinois Power C	Cooperat	tive	SERC	1													
2.	Megan Wagner	Sunflower Electric Power	r Corpor	ation	SPP	1													
3.	Mark Ringhausen	Old Dominion Electric Co	operativ	/e	RFC	3, 4													
4.	Shari Heino	Brazos Electric Power Co	ooperati	ve, Inc	. ERCO	Γ 1, 5													
13	Group	Gregory Campoli		ISO/R	TO Star	ndards	Review Co	ommitt	ee		Х								
	Additional Member	Additional Organization	n Regio	n Seg	ment Se	election													
1.	Stephanie Monzon	РЈМ	RFC	2															
2.	Ben Li	IESO	NPCC	2															
3.	Matt Goldberg	ISO-NE	NPCC	2															
4.	Gary DeShazo	CAISO	WECC	2															
5.	Steve Myers	ERCOT	ERCO	T 2															
6.	Ken Gardner	AESO	WECC	2															
7.	Bill Phillips	MISO	RFC	2															
8.	Don Weaver	NBSO	NPCC	2															
Q	Charles Yeung	SPP	SPP	2															



Gro	oup/Individual	Commenter	Organization			Reg	istere	d Ball	ot Bod	ly Seg	ment		
				1	2	3	4	5	6	7	8	9	10
14.		Janet Smith, Regulatory											
	Individual	Affairs Supervisor	Arizona Public Service Company	Х		Х		Х	Х				
15.	Individual	Sandra Shaffer	PacifiCorp	Х		Х		Х	Х				
16.	Individual	Brent.Ingebrigtson	LG&E and KU Services	Х		Х		Х	Х				
17.	Individual	Alice Ireland	Xcel Energy	Х		Х		Х	Х				
18.	Individual	Thad Ness	American Electric Power	Х		Х		Х	Х				
19.	Individual	John Seelke	Public Service Enterprise Group	Х		Х		Х	Х				
20.	Individual	David Thorne	Pepco Holdings Inc	Х		Х							
21.	Individual	Karen Webb	City of Tallahassee (TAL)					Х					
22.	Individual	Andrew Gallo	City of Austin dba Austin Energy	Х		Х	Х	Х	Х				
23.	Individual	Kasia Mihalchuk	Manitoba Hydro	Х		Х		Х	Х				
24.		Steve Alexanderson				Х	Х					Х	
	Individual	P.E.	Central Lincoln										
25.			Ingleside Cogeneration LP (Occidental					Х					
	Individual	Michelle D'Antuono	Chemical in the ballot body)										
26.	Individual	Laura Lee	Duke Energy	Х		Х		Х	Х				
27.	Individual	Don Jones	Texas Reliability Entity										Х



Gro	oup/Individual	Commenter	Organization			Reg	istere	d Ball	ot Bod	ly Seg	ment		
				1	2	3	4	5	6	7	8	9	10
28.	Individual	John Brockhan	CenterPoint Energy Houston Electric, LLC	Х									
29.	Individual	Michael Falvo	Independent Electricity System Operator		Х								
30.	Individual	Steve Alexanderson P.E.	Central Lincoln			X	X					Х	
31.	Individual	Andrew Z. Pusztai	American Transmission Company	Х									
32.	Individual	Daniel Duff	Liberty Electric Power					Х					
33.	Individual	Chris Mattson	Tacoma Power	Х		Х	Х	Х	Х				
34.	Individual	Patrick Brown	Essential Power, LLC					Х					
35.	Individual	Maggy Powell	Exelon Corporation and its affiliates	Х		Х		Х	Х				
36.	Individual	Jay Campbell	NV Energy	Х		Х	Х	Х					
37.	Individual	Darryl Curtis	Oncor Electric Delivery Company LLC	Х									
38.	Individual	Greg Travis	Idaho Power Company	Х		Х							
39.	Individual	Marie Knox	MISO		Х								
40.	Individual	Scott Berry	Indiana Municipal Power Agency				X						
41.	Individual	Kathleen Goodman	ISO New England Inc		Х								



1. The RCSDT has revised the parts of Requirements R1, R2, R3, R4, R5, and R6 of COM-001-2 that began only with "Adjacent..." to begin with "Each adjacent..." to avoid the appearance of creating a defined glossary phrase. Do you agree with the changes? If not, please explain in the comment area below.

Summary Consideration: Twenty-seven stakeholders completing the comment form support the changes by the RCSDT. Of those, there were two commenters not in support of the RCSDT's change to the sentence structure from "Adjacent..." to "Each adjacent..." This change was made to eliminate the ambiguity that a glossary term was intended by the drafting team and to achieve greater clarity. Another comment concerned the meaning of "adjacent" in terms of geography. The RCSDT notes that due to asynchronous connection (DC tie), some entities may not be geographically adjacent, but electrically adjacent; therefore, adjacency for synchronously connected entities is applied in the typical manner for entities which are, as a rule, geographically adjacent. Additionally, one commenter questioned the revision in Draft 6, Requirement R5, Part 5.5 and Requirement R6, Part 6.3, when the RCSDT applied "Each" before "adjacent," and by doing so inadvertently changed the glossary term "Adjacent Balancing Authority" to just "adjacent Balancing Authority" which is not a glossary term. The RCSDT notes that the spirit of the phrase "adjacent Balancing Authority" remains accurate and that this was a clerical error.

A single entity argued the requirements should be certification requirements, and not in a standard. The RCSDT directs the commenter to Section 500 of the NERC Rules of Procedure which address certification. The certification process is a program to identify entities that are applicable to and responsible for the reliability standards.

Organization	Yes or No	Question 1 Comment
Colorado Springs Utilities	No	Adjacent is still an ambiguous term. Does the SDT mean to refer to entities which share an interface/tie-line; entities which have geographically abutting service territories or Areas; entities within the same geographical region but not necessarily "touching"; etc.? Is this the same as or different from "neighboring," and what is the meaning of that term? Perhaps this term deserves a glossary entry.
Response: The RCSDT believes this standard neighbors. No change made.	ndard is not a	bout geographical neighbors, it is about the effect of being electrical
NV Energy	No	If "Adjacent", a capitalized word, must be in the Definitions section merely



		*
Organization	Yes or No	Question 1 Comment
		because it's capitalized, what about "Each"? Other sentences have capitalized words, such as "If", "Its" and "All". If "Adjacent" is in the Definitions merely because it's capitalized, please also add "If", "Its" and "All".
Response: The RCSDT modified the us achieve clarity within the requirement.		ent" in draft 5 of COM-001-2 to eliminate the appearance of a defined term to arted the sentence. No change made.
MISO	No	While MISO disagrees with the modifications to COM-001-1 proposed in COM-001-2 generally, it does not disagree with the clarity provided in the proposed addition of "Each" in front of "Adjacent".
Response: The RCSDT thanks you for	your support (of the modification to "Adjacent." No change made.
ISO New England Inc	No	The ISO-NE continues to believe that these a certification types of requirements and that they do not belong in a standard.
register or are registered to perform consystem will meet or exceed certain minut tasks (i.e., Requirements) for these fund Procedure, Section 500 and Appendix Section states: "The purpose of the for compliance with the FERC approver	ertain reliabilithimum criteria ctions. The propersions. The propersion of the prope	ition Program, the goal of which is to ensure that organizations who apply to by functions deemed particularly crucial to the reliability of the bulk power (i.e., Reliability Standards) demonstrating they are capable of performing the ocess for certification of organizations is included in the NERC Rules of ole, the first paragraph of Section 500 – Organization Registration and on Registration Program is to clearly identify those entities that are responsible andards. Organizations that are registered are included on the NERC nowing the content of and for complying with all applicable reliability
PacifiCorp	No	
Ingleside Cogeneration LP (Occidental Chemical in the ballot	Yes	Ingleside Cogeneration LP agrees that the modification removes all doubt that a glossary definition is inferred. We support all clarifications of this



Organization	Yes or No	Question 1 Comment
body)		kind.
Response: The RCSDT thanks you for y	our comment	
Texas Reliability Entity	Yes	"Adjacent Balancing Authority" is a defined term in the NERC Glossary, and use of the non-defined term "adjacent Balancing Authority" in this draft will cause confusion. Exactly what difference is intended by using the lowercase "a" instead of the defined term?
		uthority" should be "Adjacent Balancing Authority," the defined NERC Glossary ess and a typo was made during editing of the other usages of "adjacent."
Independent Electricity System Operator	Yes	Notwithstanding our opposition to R1.2.
Response: Thank you for your support	. No change r	made.
FirstEnergy	Yes	
SERC OC Standards Review Group	Yes	
Luminant	Yes	
Western Electricity Coordinating Council	Yes	
Dominion	Yes	
SPP Standards Review Group	Yes	



Organization	Yes or No	Question 1 Comment
MRO NSRF	Yes	
Northeast Power Coordinating Council	Yes	
ACES Power Marketing Standards Collaborators	Yes	
Arizona Public Service Company	Yes	
Xcel Energy	Yes	
American Electric Power	Yes	
Public Service Enterprise Group	Yes	
Pepco Holdings Inc	Yes	
City of Tallahassee (TAL)	Yes	
City of Austin dba Austin Energy	Yes	
Manitoba Hydro	Yes	
Duke Energy	Yes	
CenterPoint Energy Houston Electric, LLC	Yes	
American Transmission Company	Yes	



Organization	Yes or No	Question 1 Comment
Liberty Electric Power	Yes	
Tacoma Power	Yes	
Oncor Electric Delivery Company LLC	Yes	
Idaho Power Company	Yes	



2. The RCSDT has revised parts of two requirements (Parts 3.5 and 4.3) in COM-001-2 and added two additional parts (Parts 3.6 and 3.4) to address concerns about the phrase "synchronously connected within the same Interconnection." Do you agree these changes address concerns where entities might only be adjacent across an Interconnection for where connected by a Direct Current (DC) tie? If not, please explain in the comment area below.

Summary Consideration: Thirty-one stakeholders completing the comment form support the changes by the RCSDT. Of those, seven provided comments. Two comments suggested combining Requirements R3, Parts 3.5 and 3.6 and Requirement R4, Parts 4.3 and 4.4 to have one part each that says "...synchronously or asynchronously connected." The RCSDT believes this is a semantic change and having each condition in each requirement separates the emphases and provides the desired clarity. One commenter raised the issue of "adjacent" addressed in Question 1 above. A commenter expressed concern about the Reliability Coordinator not being required to have an Interpersonal Communication capability across an interconnection. The RCSDT notes that some Reliability Coordinators communicate with other Reliability Coordinators across interconnections; however, the requirement is to have the Interpersonal Communication capability within the same interconnection. Two commenters questioned why the synchronous and asynchronous conditions were in the requirements. The RCSDT added these to achieve a greater level of clarity that not all Transmission Operators are geographically adjacent. For example, the RCSDT considered phrases like "electrically connected," but that creates the problem that all Transmission Operators are electrically connected. The use of adjacent and the synchronous and asynchronous conditions in each part achieve the necessary clarity based on transmission operations.

A single entity argued the requirements should be certification requirements and not in a standard. The RCSDT directs the commenter to Section 500 of the NERC Rules of Procedure which address certification. The certification process is a program to identify entities that are applicable to and responsible for the reliability standards.

Organization	Yes or No	Question 2 Comment
Northeast Power Coordinating Council	No	If 3.5 and 4.3 were made to read: "Each connected adjacent Transmission Operator." Then 3.6 and 4.4 (not 3.4 as indicated in the question) would not be required.
		If 3.6 and 4.4 are to be kept, then the wording of 3.6 and 4.4 should be made to read: "Each adjacent Transmission Operator asynchronously connected through a DC tie." Systems cannot be asynchronously connected.

Response: The RCSDT thanks you for your comments. These are semantic changes and the current Requirement R3, Parts 3.5 and 3.6 and Requirement R4, Parts 4.3 and 4.4 provide the clarity requested by industry stakeholders represented by the ballot. No



Organization	Yes or No	Question 2 Comment
change made.		
Colorado Springs Utilities	No	See previous comment on "adjacent".
Response: Please see the RCSD	T's response a	bove in question 1. No change made.
		PacifiCorp does not understand the RCSDT's rationale for creating separate subrequirements for adjacent Transmission Operators that are synchronously and asynchronously connected, in both R3.5/R3.6 and R4.3/R4.4. PacifiCorp recommends the following singular sub-requirement for both R3 and R4: "Each adjacent Transmission Operator (whether synchronously or asynchronously connected)." mments. These are semantic changes and the current Requirement R3, Parts 3.5 and ovide the clarity requested by industry stakeholders represented by the ballot. No

Response: The RCSDT thanks you for your support of the improvements to Requirements R3 part 3.5 and R4 part 4.4. The RCSDT made additional clarifying changes from draft 5 to draft 6 in Requirements R3 and R4 to address the issue that some Transmission Operators (not Reliability Coordinators) that may not be adjacent for situations other than synchronously connected within the same Interconnection in the traditional understanding. For example, some entities have connections beyond the interconnection and some connections are asynchronous. To address this concern, the RCSDT separated the requirements to identify "synchronously



Organization	Yes or No	Question 2 Comment	
connected" and "asynchronousl made.	y connected,"	and removed the "within the same Interconnection" to achieve this clarity. No change	
Requirements for the Reliability Coordinator are addressed in Requirements R1 and R2, which do not specify the synchronous or asynchronous connection. Additionally, the parts 1.2 and 2.2 only require the Reliability Coordinator to have an Interpersonal Communication and Alternative Interpersonal Communication capability with other Reliability Coordinators within the same Interconnection. For example, the loss of a DC tie does not result in a negative reliability impact and is analogous to a load or generator loss because flows would not redistribute. Each end of the DC tie must adjust generation to account for the loss of the DC tie; therefore, no coordination is required between entities. The standard does not preclude the Reliability Coordinator from having a capability with another Reliability Coordinator in another Interconnection. No change made.			
NV Energy	No	What difference does a synchronous or asynchronous connection make? Do not both have a reliability impact on the two entities on either side? Since there is a reliability impact, regardless of connection type, a separate Requirement is superfluous.	
Response: The RCSDT made additional clarifying changes from draft 5 to draft 6 in Requirements R3 and R4 to address the issue that some Transmission Operators may not be adjacent for situations other than synchronously connected within the same Interconnection in the traditional understanding. For example, some entities have connections beyond the interconnection and some connections are asynchronous. To address this concern, the RCSDT separated the requirements to identify "synchronously connected" and "asynchronously connected," and removed the "within the same Interconnection" to achieve this clarity. For example, the loss of a DC-Tie does not result in a negative reliability impact and is analogous to a load or generator loss because flows would not redistribute. Each end of the DC-Tie must adjust generation to account for the loss of the DC-Tie; therefore, no coordination is required between entities. No change made.			
MISO	No	While MISO disagrees with the modifications to COM-001-1 proposed in COM-001-2 generally, it does not disagree with the proposed removal of "within the same interconnection."	
Response: The RCSDT thanks yo	Response: The RCSDT thanks you for your support in removing "within the same Interconnection." No change made.		
ISO New England Inc	No	The ISO-NE continues to believe that these a certification types of requirements and	



Organization	Yes or No	Question 2 Comment
		that they do not belong in a standard.
register or are registered to persystem will meet or exceed certasks (i.e., Requirements) for the Procedure, Section 500 and Application states: "The purposer compliance with the FERC and are registered to persystem."	erform certain rertain minimum hese functions. opendix 5A. For oose of the Organ pproved reliab	Certification Program, the goal of which is to ensure that organizations who apply to eliability functions deemed particularly crucial to the reliability of the bulk power criteria (i.e., Reliability Standards) demonstrating they are capable of performing the The process for certification of organizations is included in the NERC Rules of example, the first paragraph of Section 500 – Organization Registration and enization Registration Program is to clearly identify those entities that are responsible bility standards. Organizations that are registered are included on the NERC Compliance and the content of and for complying with all applicable reliability standards" No
Tacoma Power	Yes	This seems excessive. It should be sufficient to say "each adjacent TOP" regardless of whether they are connected synchronously or via a DC tie.
Response: The RCSDT thanks stakeholder comment. No cha		mment. The clarifications for asynchronous and synchronous were based on industry
FirstEnergy	Yes	
SERC OC Standards Review Group	Yes	
Luminant	Yes	
Western Electricity Coordinating Council	Yes	
Dominion	Yes	
SPP Standards Review Group	Yes	



Organization	Yes or No	Question 2 Comment
MRO NSRF	Yes	
ACES Power Marketing Standards Collaborators	Yes	
Arizona Public Service Company	Yes	
Xcel Energy	Yes	
American Electric Power	Yes	
Public Service Enterprise Group	Yes	
Pepco Holdings Inc	Yes	
City of Tallahassee (TAL)	Yes	
Manitoba Hydro	Yes	
Ingleside Cogeneration LP (Occidental Chemical in the ballot body)	Yes	
Duke Energy	Yes	
CenterPoint Energy Houston Electric, LLC	Yes	
Independent Electricity	Yes	



Organization	Yes or No	Question 2 Comment
System Operator		
American Transmission Company	Yes	
Liberty Electric Power	Yes	
Oncor Electric Delivery Company LLC	Yes	
Idaho Power Company	Yes	



3. The RCSDT made minor changes and reformatted the evidence examples in the Measures of COM-001-2 for greater clarity. Do you agree with these revisions? If not, please explain in the comment area below.

Summary Consideration: Twenty-eight stakeholders completing the comment form question support the changes by the RCSDT. Of those, three offered substantive comments. One commenter noted that having "physical assets" listed as one type of evidence in the Measures M1 through M8 is problematic. The RCSDT believes an entity may utilize any number of options to demonstrate compliance with the requirements. One commenter had concerns about the use of an intermediary for Interpersonal Communication capability. The RCSDT emphasizes that an entity may employ any number of approaches to achieve the requirements. Another commenter suggested inserting "applicable" as a clarification in Measure M10 to more clearly state the relationship between the entities and the associated requirements. In consideration of the suggestion, the RCSDT inserted the word "respectively," rather than "applicable" to more accurately note the relationship. Additionally, the RCSDT applied the same consideration to Requirement R10 to achieve the same clarity. The RCSDT also removed a typographical error revealed by a commenter.

Organization	Yes or No	Question 3 Comment
Colorado Springs Utilities	No	See the comment on "evidence" included in the comment section of question 4.
Response: Please see the RCSDT's	response in qu	estion 4. No change made.
ACES Power Marketing Standards Collaborators	No	We continue to believe that use of "physical assets" instead of "demonstration of physical assets" is problematic. Auditors must be able to take evidence with them and they could not take the physical assets. They could, however, takes notes they record from demonstration of the physical assets with them. While we understand that the auditors will understand they can't take the "physical assets", it does not change the fact that the listing "physical assets" as evidence is technically not correct.
Response: The RCSDT believes that physical assets are demonstration of evidence for Interpersonal Communication capability. The responsible entity may exercise other methods of evidence for the physical assets (e.g., photographs or other documentation). No change made.		
Ingleside Cogeneration LP (Occidental Chemical in the	No	Ingleside Cogeneration LP would like to see the project team include references to intermediaries which act as a single point of contact between GOPs and BAs/TOPs. This is a very common and necessary communications hierarchy - as it is just not possible for the



Organization	Yes or No	Question 3 Comment
ballot body)		BA/TOP to otherwise coordinate the actions of multiple GOPs. We believe that it is appropriate that GOP must retain evidence that Interpersonal Communication capability is maintained up to the intermediary - but the BA or TOP must be responsible for the remainder of the link. This accountability matches the most common contractual arrangements where both the BA/TOP and the GOP have signed agreements with the intermediary.
•	•	des the "what" to do, not the "how" to implement the standard. Having an intermediary for ty may implement the standard. No change made.
MISO	No	While MISO appreciates the SDT's modifications to Measure M10 since the last draft, the Measure remains ambiguous as to which parties should be contacted when an entity experiences a failure of its Interpersonal Communication capability that lasts 30 minutes or longer. MISO respectfully submits the following changes for Measure 10: "Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall have and provide upon request evidence that it notified the entities as identified in Requirements R1, R3, and R5, as applicable, within 60 minutes of the detection of a failure of its Interpersonal Communication capability that lasted 30 minutes or longer. Evidence could include, but is not limited to dated and time-stamped: test records, operator logs, voice recordings, transcripts of voice recordings, or electronic communications. (R10.)"
inserting the word "respectively," r "applicable" is open to interpretati	rather than the on. For examp	in Measure M10 and proposes to clarify Requirement R10, Measure M10, and R10 VSL by suggested "as applicable." The word "respectively" is used rather than "applicable" because le, adding the word "respectively" means that the Reliability Coordinator in R1 is not required or R5. The RCSDT intended the requirements to map to the entity. Clarifying changes made.
City of Tallahassee (TAL)	Yes	For Measure 7, the first line duplicates the word "that".
Response: The RCSDT appreciates	you bringing av	vareness to this typo. The additional "that" has been removed from Measure M7 in COM-001-



Organization	Yes or No	Question 3 Comment	
2. Error correction made.	2. Error correction made.		
Independent Electricity System Operator	Yes	Notwithstanding our opposition to R1.2.	
Response: Thank you for your supp	Response: Thank you for your support. No change made.		
FirstEnergy	Yes		
SERC OC Standards Review Group	Yes		
Luminant	Yes		
Western Electricity Coordinating Council	Yes		
Dominion	Yes		
SPP Standards Review Group	Yes		
MRO NSRF	Yes		
Northeast Power Coordinating Council	Yes		
Arizona Public Service Company	Yes		
PacifiCorp	Yes		



Organization	Yes or No	Question 3 Comment
Xcel Energy	Yes	
Public Service Enterprise Group	Yes	
Pepco Holdings Inc	Yes	
City of Austin dba Austin Energy	Yes	
Manitoba Hydro	Yes	
Duke Energy	Yes	
Texas Reliability Entity	Yes	
CenterPoint Energy Houston Electric, LLC	Yes	
American Transmission Company	Yes	
Liberty Electric Power	Yes	
Tacoma Power	Yes	
NV Energy	Yes	
Oncor Electric Delivery Company LLC	Yes	
Idaho Power Company	Yes	



4. Do you have any other comments on COM-001-2, not expressed in questions above, for the RCSDT?

Summary Consideration: There were several minority comments concerning the proposed standards COM-002-3 and IRO-001-3 that the RCSDT could not respond to because they were approved by industry. Other comments revealed errors in the standard that the RCSDT corrected. Most comments were continuances from previous comment periods, along with various minority comments which the RCSDT provided. Commenters raised the issue that having a communication capability should be a matter of the NERC Certification process, as raised in the above questions. The RCSDT noted that certification was the process to ensure registered entities could perform those tasks associated with the reliability standards and that each entity should address this issue with NERC if further information is needed. Also from previous comment periods, commenters noted this standard should be a Results-Based Standard (RBS). The RCSDT did not disagree that the RBS format would be beneficial, but the current standard, as written, achieves the necessary goals set forth in the Standards Authorization Request (SAR).

Other minority continuances from previous comment periods include the use of "means," "primary," and other words or suggestions in the proposed definitions. The RCSDT maintains that these words are problematic and did not alter the definitions. Additionally, the definitions describe the "what" for communications, not the "how." Some commenters noted that requiring the Generation Operator or Distribution Provider to have an Interpersonal Communication capability is redundant and unnecessary because they would already have a capability by virtue of it being established by the Balancing Authority and Transmission Operator. The RCSDT responded that each entity (i.e., both ends of the communication) is required to have the communication capability which is coordinated with the other entity to establish the capability. Other comments included requests to specifically say that the proposed COM-001-2 is "not for the exchange of data." The RCSDT did not feel it necessary to insert such a clause, but pointed the commenter to reliability standards IRO-010 and IRO-014 which address data and information.

A commenter questioned having the ability to select other communications as needed; however, the RCSDT notes that an entity cannot randomly choose or designate other communication capabilities without coordinating the capability with other parties. Each applicable entity must know what its Interpersonal Communication capability is with others and, if applicable, its Alternative Interpersonal Communication capability with others. The same commenter questioned how the standard achieves "diversely routed," as written in the current standard COM-001-1. The RCSDT contends "diversely routed" is achieved through the proposed definitions. The proposed definition of Alternative Interpersonal Communication contains, "…not utilize the same infrastructure (medium) as Interpersonal Communication used for day-to-day operation."

There were other minority comments about time limits and notifications. One commenter suggested having a defined notification process using a hierarchal format. The RCSDT did not agree with this concept due to the diverse relationships between entities making it impractical. One noted that the 60-minute notification time was insufficient. The RCSDT considered this, as in previous drafts, and contends the period is adequate. Another did not agree with the two-hour limit on initiating action to repair or designating an

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Alternative Interpersonal Communication capability. Again, the RCSDT holds that the time elements have been considered and supported by industry.

There were minority comments about the Measures and VSLs. The RCSDT inserted the word "respectively" in Requirement R10 and similarly in Measure M10 to clarify the expected relationship between the listed functional entities and the listed requirements. Some commenters noted that the use of "physical assets" is an inappropriate listing of evidence in the measures. The RCSDT disagreed that having the asset can be one form of demonstrating the necessary evidence. A commenter requested additional granularity in the VSLs in addition to what the RCSDT provided in the draft 6 posting. The RCSDT believes that having two (High and Severe) VSLs is the appropriate VSL granularity given the expected number of entities required to have a communication capability. More importantly, the reliability need is not to miss having a communication capability with any entity necessary for reliability operations. The same commenter requested a lower VSL for Requirements R1, R3 and R5 because, in this case, the Reliability Coordinator, Transmission Operator, and Balancing Authority are all required to have an Alternative Interpersonal Communication capability. The RCSDT contends that a violation should not be contingent on the preponderance of other mitigating requirements. Both VRFs and VSLs are to be evaluated on an individual requirement level without regard to other contributing circumstances. A comment suggested lowering the VRF on Requirement R7 from High to Medium. The RCSDT agreed and made the change since the loss of a communication capability with the Distribution Provider does not present the same level of risk that a Generator Operator would (e.g., during blackstart restoration).

Other minority comments related to the effective date language and data retention. The effective date language governed by NERC staff and the RCSDT only addresses the time elements within the template language. A question was raised about voice recordings generally having only a 90-calendar day retention, but the data retention specified 12 calendar months. The RCSDT recognizes this oversight and added clarifying language to account for voice recordings.

The majority comments in Question 4, also raised in previous comment periods, are related to Requirement R11, which had six distinct reoccurring themes: (1) A threshold for determining when to report a failure of the Generation Operator or Distribution Provider communication capability. (2) The reliability benefit of having to consult with the Balancing Authority or Transmission Operator when neither the Generation Operator nor Distribution Provider are required to have an Alternative Interpersonal Communication capability. (3) Consultation for the purpose of determining a mutually agreeable action for the restoration of its Interpersonal Communication capability. (4) What does "action" constitute? (5) Changing the language to specifically name the entities to be notified in the corresponding Measure M11. (6) The Generation Operator and Distribution Provider should be required to have an Alternative Interpersonal Communication capability. The RCSDT appropriately responded to all six issues as follows:

For item (1) a threshold is not provided to allow flexibility for the Generation Operator or Distribution Provider to determine what constitutes a failure of its Interpersonal Communication capability. The reliability benefit argued in (2) about consulting with the Balancing Authority or Transmission Operator is for the purpose of bringing awareness to these entities that communications are

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compromised and to know what is being done to restore the capability. In issue (3) the purpose is to consult, the requirement clarifies the reliability purpose to determine a mutually agreeable action for restoration. The reliability goal is for the Balancing Authority or Transmission Operator to maintain awareness the communication capability has failed and what is being done to restore the capability. The Generation Operator or Distribution Provider is free to employ an Alternative Interpersonal Communication capability, but has no requirement to do so. The RCSDT responded to item (4) regarding what "action" meant. Action can be a number of things which the entity under takes to restore its capability. It could include, but is not limited to: contacting internal staff to initiate a repair, contacting a third party for repair, seeking assistance to troubleshoot the problem, or implementing its procedure(s) regarding the restoration of the capability. There was a suggestion concerning item (5) to explicitly name the entities in Requirement R11. The RCSDT agreed it would improve readability, but it would not be inconsistent with the way the measure is written using the reference to the two requirements. Item (6) was also raised in previous comment periods and the RCSDT noted that only requiring the Generation Operator and Distribution Provider to have an Interpersonal Communication capability is consistent with the direction provided in Order 693.

Organization	Yes or No	Question 4 Comment
City of Austin dba Austin Energy		(1) Both instances of "Reliability Coordinator" in the VSLs for R3 should be "Transmission Operator" to match the language of the standard.
		Response: The RCSDT appreciates you bringing awareness to this error in Requirement R3 VSL. The reference to "Reliability Coordinator" has been changed to Transmission Operator for Requirement R3 in both the High and Severe VSL. Error correction made.
		(2) Both instances of "Reliability Coordinator" in the VSLs for R5 should be "Balancing Authority" to match the language of the standard.
		Response: The RCSDT appreciates you bringing awareness to this error in Requirement R5. The reference to "Reliability Coordinator" has been changed to Balancing Authority for Requirement R5 in both the High and Severe VSL. Error correction made.
		(3) In the VSLs for R9 and R10 the use of "and" seems incorrect.
		Austin Energy suggests the following revisions for all VSL levels (only the Lower VSL shown for simplicity and revised words suggested in capital letters):



Organization	Yes or No	Question 4 Comment
		R9, Lower VSL: "The Reliability Coordinator, Transmission Operator, OR Balancing Authority"
		Response: RCSDT appreciates you bringing awareness to this error in Requirement R9 VSL. The use of "and" between the responsible entities and the requirement references has been corrected to "or" for proper construction in Requirements R9 and R10 VSLs. Error correction made.
		R10, Lower VSL: "The Reliability Coordinator, Transmission Operator, OR Balancing Authority failed to notify the entities identified in Requirements R1, R3, OR R5, RESPECTIVELY, upon the detection"
		Response: The RCSDT agrees with the ambiguity in Measure M10 and proposes to clarify Requirement R10, Measure M10, and R10 VSL by inserting the word "respectively." For example, adding the word "respectively" means that the Reliability Coordinator in R1 is not required to notify the entities identified in Requirement R3 or R5. The RCSDT intended the requirements to map to the entity. Clarifying changes made.
Response: Please see responses	s above.	
ACES Power Marketing Standards Collaborators		(1) The definition of Alternative Interpersonal Communication needs further refinement. As it is written, the primary Interpersonal Communication that is used to satisfy R1, R3, and R5 is also an Alternative Interpersonal Communication. This primary Interpersonal Communication established in R1, R3, and R5 meet all of the requirements of Alternative Interpersonal Communication. It is an Interpersonal Communication and it is capable of replacing the Interpersonal Communication used as the Alternative Interpersonal Communication (which by definition is an Interpersonal Communication) in R2, R4, and R6. Thus, each Interpersonal Communication and Alternative Interpersonal Communication. One solution may be to add a third definition: Primary Interpersonal Communication. It would essentially be an

Organization	Yes or No	Question 4 Comment
		Interpersonal Communication that is designated as primary or the normal communication system. Then Alternative Interpersonal Communication would be defined based on the ability of the Interpersonal Communication to substitute for the Primary. R1, R3, and R5 would need to be changed to refer to the Primary Interpersonal Communication. Another option might be to simply stick with the two existing definitions and use "primary" in R1, R3, and R5. Regardless of the option selected, "another" needs to be added before the second use of Interpersonal Communication for absolute clarity.
		Response: The definitions clarify the need to differentiate the communication capabilities. The RCSDT notes that, in this last ballot, industry stakeholder consensus does not support the use of "primary" as a part of Interpersonal Communication. No change made.
		(2) We appreciate that the drafting team added another VSL for requirements R1 through R8, however, we believe additional levels should be populated. For example, if a Transmission Operator or Balancing Authority failed to have Interpersonal Communications capability with a Distribution Provider but had Interpersonal Communications capability with all other required entities, it has met the vast majority of the requirement. Since VSLs are a measure of how much the requirement was missed by the responsible entity, a Lower VSL seems most appropriate for failing to have Interpersonal Communication capability with a DP.
		Response: The RCSDT added the High VSL for Requirements R1 through R8 from draft 5 to draft 6 to account for greater granularity in a violation. For each applicable responsible entity named in each of the requirements, the number of entities for which it must have an Interpersonal Communication or Alternative Interpersonal Communication may vary significantly. The RCSDT believed that adding one additional VSL was an appropriate solution to account for variability in the number of entities. No change made.
		(3) It seems odd to change the effective date language from what NERC has consistently used throughout the standards. "Following" was replaced with "beyond



Organization	Yes or No	Question 4 Comment
		the date this standard is approved". For consistency with the rest of NERC standards, we recommend changing it back to the original language.
		Response: The RCSDT appreciates your comment. The language in the Effective Date section is standard language adopted by NERC and used throughout the body of standards currently under development by teams. The RCSDT is not able to alter this language. No change made
		(4) We appreciate the changes to R1, R3, R5, R7 and R8 that attempt to clarify that a failure of the primary Interpersonal Communication capability is not a violation of these requirements. However, we believe these requirements will never be approved by the Commission. As they are written, they literally say that R1, R3, R5, R7, and R8 apply when the responsible entity has Interpersonal Communication capability and they don't apply when you don't have the capability but rather other requirements apply. This means R1, R3, R5, R7 and R8 could never be violated which begs the question why are they even needed. Because Commission approval is unlikely for these requirements, we continue to believe the best solution is to focus the requirements on having a communication medium rather than capability. If "capability" were struck from all of the requirements, the requirements would then focus on a communication medium as defined in Interpersonal Communication and Alternative Interpersonal Communication. This solution would still keep the requirements technology neutral since a medium could be any communication system or device and actually provide more flexibility in the requirements. Because the requirements would focus on having a medium in place rather than a capability, failure of the medium would not automatically translate into a violation which means the problematic "unless [responsible entity] experiences a failure of its Interpersonal Communication capability" language could be dropped. Dropping this language would improve the likelihood that the Commission would approve the standard.
		Response: The RCSDT thoughtfully considered the comments about where an entity might be exempt from the requirement(s). No situation exempts an applicable entity from the requirement(s) of this standard. No change made.

Organization	Yes or No	Question 4 Comment
		(5) The VRF for R7 should be Medium. Failure for the DP to have Interpersonal Communication with its BA or TOP does not meet the basic requirement of a High VRF. A High VRF requires that violation of the requirement would "directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures." We cannot fathom any situation where failure of a BA and TOP being able to communicate would directly lead to or cause instability, separation, or cascading. It could, however, lead to the inability to know the electrical state of part of the transmission system. This fits the Medium VRF definition. Furthermore, the fact that R4 and R6 do not include DP in the list of functional entities for a TOP and BA to have Alternative Interpersonal Communication further supports a Medium VRF.
		Response: The RCSDT thanks you for your comments and changed Requirement R7 to Medium VRF. Further consideration has been given to the Requirement R8 VRF; however, the RCSDT concluded the Generator Operator has a higher importance and risk to reliability, particularly blackstart capability. Change made to Requirement R7 VRF. No change made to Requiremnt R8 VRF.
		(6) In Measure M11, we believe entity affected should be replaced with its TOP and BA. This makes the measure clearer and easier to read without the need to refer back to the requirement.
		Response: The RCSDT agrees that naming the specific entities in the measure adds to the readability; however, changing the word "entity" to the named entities in Requirements R7 and R8 would be inconsistent with the way the measure is written using the reference to the two requirements. No change made.
		(7) We disagree with the data retention period. Because voice recordings are mentioned in the measures as one type of evidence for demonstrating compliance to the requirements, the data retention period should not exceed 90 days. Many companies do not store voice recordings longer than this. To compel a responsible entity to store voice recordings for longer should be justified. We do not see this



Organization	Yes or No	Question 4 Comment
		justification.
		Response: The RCSDT agrees with the comment about the issue concerning the time period for retaining voice recording. The data retention has been revised to reflect a period of 90 calendar days for all evidence related to the requirements. Clarifying change made.
		(8) We continue to believe that the DP should not be included in this standard. However, we recognize that the drafting team is attempting to address a FERC directive. An equally efficient and effective alternative would be to leave the responsibility to the BA and TOP. Parts 3.3 and 5.3 require the TOP and BA respectively to have Interpersonal Communication capability with the DP. This will be required whether the standard applies to DP or not based on the Commission directive because the Commission expressed concern about the BA and TOP having communications with the DP during an emergency such as a blackstart event. Because DPs will have to follow directives from the RC, TOP, and BA per IRO-001-3, it is in the best interest of the DP to cooperate with assisting the BA and TOP in establishing this capability. Thus, Parts 3.3 and 5.3 could be relied on exclusively for establishing this Interpersonal Communication Capability without adding unnecessary additional compliance burden on the DP that does not support reliability.
		Response: The RCSDT thanks you for your comment and agrees that the standard is addressing FERC directives concerning the Distribution Provider. Entities on each end of the communication capability must have a responsibility to have communications. No change made.
Response: Please see response:	s above.	
MRO NSRF		The NSRF understands the importance of Interpersonal Communications and Alternate Interpersonal Communications and always having the ability to communicate with others. The NSRF questions why per R9 (and similar time requirement per R10) that when testing the Alternate Interpersonal Communications



Organization	Yes or No	Question 4 Comment
		is unsuccessful, why there is a two-hour time limit to initiate an action, repair, or designate a replacement.
		Response: The RCSDT believes that the Reliability Coordinator, Transmission Operator and Balancing Authority, as reliability entities for Requirement R9, must initiate action to repair or designate an Alternative Interpersonal Communication capability timely so that in the event the Alternative Interpersonal Communication capability is called upon, the capability will be available. Having the measurable time period in the requirement ensures that entities will not delay action in addressing the unsuccessful testing of the capability. No change made.
		Project 2012-08.1 defines "Reliable Operation" means operating the Elements of the Bulk Power System within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or Cascading failures of such system will not occur as a result of a sudden disturbance, including a Cyber Security Incident, or unanticipated failure of system Elements. The loss of an Alternate Interpersonal Communication will not immediately impact the Reliable Operations of the BPS. Recommend that this not be contained within the Standard as entity's will view this as a Good Utility Practice.
		Response: The RCSDT agrees that the loss of an entity's Alternative Interpersonal Communication capability should not affect "Reliable Operation" of the Bulk Power System; however, the regulatory directive in Order No. 693 addressing the proposed definitions of "Bulk Power System," "Reliability Standard," and "Reliable Operations" must be reviewed collectively. The proposed definition for "Reliability Standard" contains the defined term "Reliable Operations," and is defined as: "A requirement to provide for Reliable Operation of the Bulk Power System, including without limiting the foregoing, requirements for the operation of existing Bulk Power System Facilities, including cyber security protection, and including the design of planned additions or modifications to such Facilities to the extent necessary for Reliable Operation of the Bulk Power System, but the term does not include any requirement to enlarge Bulk Power System Facilities or to construct new transmission capacity or generation

Organization	Yes or No	Question 4 Comment
		capacity. A Reliability Standard shall not be effective in the United States until approved by the Federal Energy Regulatory Commission and shall not be effective in other jurisdictions until made or allowed to become effective by the Applicable Governmental Authority." In the current paradigm, having an Alternative Interpersonal Communication capability is: "A requirement to provide for Reliable Operation of the Bulk Power System," as the proposed definition of "Reliability Standard" defines and is necessary to support communications between and among the applicable entities in the standard. The RCSDT has addressed the scope of the SAR in addressing communication requirements for entities through an open industry consensus process.
		R10 The NSRF recommends that "applicable" be inserted between "notify entities" This will assure that RC's will inform per R1, TOP's will inform per R3 and BA's will inform per R5. This will assure that an interpretation is not required as in Interpretation 2010-INT-01, TOP-006.
		Response: The RCSDT agrees with the ambiguity in Measure M10 and proposes to clarify Requirement R10, Measure M10, and R10 VSL by inserting the word "respectively," rather than the suggested: "as applicable." The word "respectively" is used rather than "applicable" because "applicable" is open to interpretation. For example, adding the word "respectively" means that the Reliability Coordinator in R1 is not required to notify the entities identified in Requirement R3 or R5. The RCSDT intended the requirements to map to the entity. Clarifying changes made.
Response: See responses abo	ve.	
CenterPoint Energy Houston Electric, LLC		1. For R10, there can be a large number of entities to notify for an Interpersonal Communication failure. During normal operations, 60 minutes can be enough time to make all the notifications. However, during emergency or adverse conditions, 60 minutes may not be sufficient. Thus, at the end of R10, the following should be added: "unless certain adverse conditions (e.g. severe weather, multiple events)



Organization	Yes or No	Question 4 Comment
		prevent the completion of notification within the 60 minutes."
		Response: The RCSDT contends that 60 minutes is sufficient for notification because the BA, RC, and TOP are required to have an Alternative Interpersonal Communication capability, and should have the ability to accomplish the required notification. Also, the loss of Interpersonal Communication capability may not always impact the entire capability. This time frame does not apply to the DP and GOP since the Alternative Interpersonal Communication capability is not required for these functional entities. No change made.
		2. For R11, the change from "mutually agreeable time" to "mutually agreeable action" is not an improvement. It should not be the concern of the other entities how (what action) the capability is restored, only that it is restored and that the entity with the failure can be reached in the interim. Thus, we suggest the following: "to determine a mutually agreeable alternative until Interpersonal Communication capability is restored."
	Response: The RCSDT agrees the desired end result is restoring the capability, and appreciates the suggested modification; however, the suggestion presents other issues; such as: What if an alternative is not available? The RCSDT believes the most appropriate and measureable way to address the loss of the Distribution Provider or Generation Operator's capability is to require the entities to communicate the action taken to restore the capability. No change made.	
Response: Please see response	s above.	
Independent Electricity System Operator		1. COM-001: We continue to disagree with R1.2, the phrase "within the same Interconnection" is troublesome. RCs between two Interconnections still need to communicate with each other for reliability coordination (e.g. between Quebec and the other RCs in the NPCC region to curtail interchange transactions crossing Interconnection boundary). The SDT's previous response that the phrase was added to address the ERCOT situation

Organization	Yes or No	Question 4 Comment
		reliability gap. The SDT's latest response that R1 as written does not preclude or limit the Reliability Coordinator from establishing Interpersonal Communication capability with others is inconsistent with the basic principle for having a reliability standard. A standard should stipulate the requirements based on what is needed to ensure reliability, not on what is not precluded. If there is a reliability need for RCs across Interconnection boundary to coordination operations, then Interpersonal Communication shall be provided. If we apply the SDT's philosophy (that the standard does not preclude), then one can argue that the standard does not need to stipulate a requirement to have Interpersonal Communication as without such a requirement, the standard does not preclude any operating entities to have it.
		Finally, we would reiterate the fact that RCs between asynchronously interconnected systems do communicate, e.g. between Quebec and its neighbor RCs. We are also aware that RCs in the Western Interconnection and those in the Eastern Interconnection do communicate as needed to coordinate TLR for transactions crossing Interconnection boundary.
		Response: From the Functional Model V5, Functional Entity - Reliability Coordinator, the RCSDT notes the following: "Balancing operations. The Reliability Coordinator ensures that the generation-demand balance is maintained within its Reliability Coordinator Area; which, in turn, ensures that the Interconnection frequency remains within acceptable limits. The Balancing Authority has the responsibility for generation-demand-interchange balance in the Balancing Authority Area. The Reliability Coordinator may direct a Balancing Authority within its Reliability Coordinator Area to take whatever action is necessary to ensure that this balance does not adversely impact reliability." Based on the last sentence, the Reliability Coordinator does not have the responsibility for these transactions. No change made.
		2. The follow comments address data retention for COM-002-3:
		a. The first bullet in Section D 1.3 stipulates that "The Reliability Coordinator, Transmission Operator, and Balancing Authority shall retain evidence of Requirement

Organization	Yes or No	Question 4 Comment
		R1 and R3, Measure M1 and M2 for the most recent 3 calendar months." We believe M2 should be M3.
		Response: The RCSDT agrees with your assessment that M2 should be M3 and has advised NERC staff of the typo in COM-002-3. Error correction made.
		b. The second bullet: "The Balancing Authority, Transmission Operator, Generator Operator, and Distribution Provider shall retain evidence of Requirement R1, Measure M1 for the most recent 3 calendar months." We believe R1 and M1 should read R2 and M2 since DP is only responsible for meeting R2.
		Response: The RCSDT agrees with your assessment that R1 and M1 should be R2 and M2. The RCSDT has advised NERC staff of the typo in COM-002-3. Error correction made.
		c. Section 2 "Violation Severity Levels": R# R2 Severe includes the Balancing Authority as one of the listed entities; however, this is inconsistent with R2 / M2 which do not include the Balancing Authority. To be consistent with R2 / M2, the Balancing Authority should be removed from VSL R# R2.
		Response: The RCSDT agrees with your assessment and has advised NERC staff that the VSL for Requirement R2 should have the entity "Reliability Coordinator" replaced with "Balancing Authority" in COM-002-3 to be consistent with the named entities in Requirement R2. Error correction made.
		While these can be regarded as typos, and do not contribute to a show-stopper vote for some, we urge the SDT and the Standards Committee to pay closer attention to the accuracy of all elements in the standard.
		3. IRO-001-3:
		Section 1.3 Data Retention (second bullet) states:
		The Operator, Balancing Authority, Generator Operator, or Distribution Provider shall retain for Requirements R2 and R3, Measures M2 and M3 shall retain voice recordings for the most recent 90 calendar days or documentation for the most



Organization	Yes or No	Question 4 Comment
		recent 12 calendar months.
		- The statement above appears to be missing "Transmission" before the word Operator.
		Response: The RCSDT agrees with your assessment of IRO-001-3 and has advised NERC staff that in the second bullet of Section D, 1.3 section, the word "Transmission" needs to be inserted in front of "Operator." Error correction made.
		- The statement above repeats "shall retain" and the highlighted instance is not required.
		Response: The RCSDT agrees with your assessment of IRO-001-3 and has advised NERC staff that in the second bullet of Section D, 1.3, the first occurrence of "shall retain" needs to be removed. Error correction made.
		- The statement above states "or" Distribution provider, implying that one entity needs to retain evidence. Starting the sentence with "Each" rather than "The" and replacing "or" with "and" may provide clarity. The same would apply to the introduction sentence prior to the bullets. COM-002-3 section D. Compliance 1.3 Data Retention provides an example of the suggested format.
		Response: The RCSDT agrees with your assessment of IRO-001-3 and has advised NERC staff that in the second bullet of Section D, 1.3, the "or" between the responsible entities should be an "and." Error correction made.
		Here is an example of the revised sentence: "Each Transmission Operator, Balancing Authority, Generator Operator, and Distribution Provider shall retain voice recordings for the most recent 90 calendar days or documentation for the most recent 12 calendar months, for Requirements R2 and R3, Measures M2 and M3".
Response: Please see response:	s above.	
Bonneville Power		BPA thanks you for the opportunity to comment on Project 2006-06, COM-001-2 and



Organization	Yes or No	Question 4 Comment	
Administration		has no comments or concerns at this time.	
Response: The RCSDT thanks yo	ou for your co	mment.	
Public Service Enterprise Group		Change R11 and replace "experiences a failure" with "detects a failure" because one may have a failure, but if it's undetected for some period of time because no communications are taking place, it's unclear when one actually "experienced a failure." We note that R10 uses the terminology "detection of a failure." Using consistent terminology in R10 and R11 would result in less confusion for compliance because there would not be an issue as to whether a difference was intended by the SDT between "experiences" and "detects" in the two requirements.	
-	Response: The RCSDT agrees with your assessment of the differences in terms and has changed "experiences" to "detects" in Requirement R11 to be consistent with Requirement R10. Change made.		
Colorado Springs Utilities		CSU appreciates the work the SDT has put into this standard, along with the others in this project and the opportunity to comment. We agree with the goal to encourage consistent communications and availability of robust & redundant communication paths. CSU appreciates that the SDT appears to have tried to write some flexibility into this standard. As written, however, this draft of COM-001-2 in its entirety seems to us unwieldy and unmanageable.	
		It appears each entity may choose its own 'primary' and Alternate "Interpersonal Communication" capabilities. Entity A may select email as its 'primary' capability, while Entity B might not select that among either 'primary' or "Alternate," and may not pay any attention on the real-time desk to email (only the designated "Alternate" requires testing).	
		Response: The requirements require the applicable entity to have a communication capability with the defined entities in each requirement. An applicable entity should not be changing its Interpersonal Communication capability independently without coordinating the change with the defined entities in a given requirement. The	

Organization	Yes or No	Question 4 Comment
		proposed definition says, "between two or more individuals" No change made.
		Also, DOs & GOs are not expected to maintain a backup ("Alternate") communications capability. It is unclear how those entities can then comply with R11 if their one and only interpersonal communication capability has failed.
		Response: The RCSDT, from draft 5 to 6 of COM-001-3, added clarifying language in Requirement R7 for the Distribution Provider and in Requirement R8 for the Generator Operator to account for the potential gap of compliance. The language was: " (unless the <responsible entity=""> experiences a failure of its Interpersonal Communication capability in which case Requirement R11 shall apply)." The RCSDT also notes this parenthetic was updated to more appropriately address the detection of the failure and now reads: " (unless the <responsible entity=""> detects a failure of its Interpersonal Communication capability in which case Requirement R11 shall apply)." No change made.</responsible></responsible>
		Sufficient evidence includes "physical assets." Does that mean we can point to the phone on the desk and the email program on the desktop PC and we're compliant? Are photographs of physical assets sufficient evidence to submit for the pre-audit questionnaire?
		Response: The RCSDT believes that physical assets are demonstration of evidence for Interpersonal Communication capability. The responsible entity may exercise other methods of evidence for the physical assets (e.g., photographs or other documentation). No change made.
		There is no requirement for the communications capabilities to be either diverse or redundant. If both our capabilities, in the end, rely on the POTS/PSTN system, is that acceptable?
		Response: The RCSDT agrees that the requirements do not specifically address this condition within the requirements themselves; however, the issue of redundancy is addressed within the proposed defined term "Alternative Interpersonal Communication." The definition reads: "Any Interpersonal Communication that is



Organization	Yes or No	Question 4 Comment
		able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation." No change made.
Response: Please see response	es above.	
Detroit Edison		Defining Interpersonal Communication as "Any medium that allows two or more individuals to interact, consult, or exchange information" will also include all Alternative Interpersonal Communications since "Any medium" is all inclusive. Consider replacing the definition of Interpersonal Communication with the following:
		Primary Interpersonal Communication: The normal communication medium that two or more individuals use to interact, consult, or exchange information relating to day-to-day operations.
		Response: The RCSDT notes that previous drafts received comments recommending the use of terms; such as, "primary," "secondary," "device," "means," and "medium" with regard to the proposed definitions. The RCSDT thanks you for your suggestion; however, the requirements are for "capability" and adding such proposed terms is not needed to achieve the necessary clarity. No change made.
		Consider replacing the definition of Alternative Interpersonal Communication with the following:
		Alternative Interpersonal Communication: Any communication medium that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as the designated Primary Interpersonal Communication.
		Response: This suggestion has only added the word "Primary" to the definition. The RCSDT contends that the use of terms, such as, "primary," "secondary," "device," "means," and "medium" with regard to the proposed definitions is not needed to achieve the necessary clarity. No change made.
		R1, R3, R5, R7, R8 should require entities to designate Primary Interpersonal

Organization	Yes or No	Question 4 Comment	
		Communication.	
		Response: This suggestion has only added the word "Primary" to the defined term. The RCSDT contends that the use of terms, such as, "primary," "secondary," "device," "means," and "medium" with regard to the proposed definitions is not needed to achieve the necessary clarity. No change made.	
		R10 and R11 should address failures to designated Primary and Alternate Interpersonal Communication.	
		Response: This suggestion has only added the word "Primary" to Requirements R10 and R11. The RCSDT contends that the use of terms, such as, "primary," "secondary," "device," "means," and "medium" with regard to the proposed definitions is not needed to achieve the necessary clarity. No change made.	
		R9 in all VSL levels the phrase "failed to initiate action to repair" or designate a replacement is subject to interpretation. Does "initiate action" include notification to the proper party to investigate and repair or does it require repairs to begin within specified times as listed in severity levels?	
		Response: The RCSDT notes that the requirement is for the entity to "initiate action," which may include, but is not limited to, notifying or request repair to restore the capability. The available alternative is to designate an Alternative Interpersonal Communication capability. No change made.	
Response: Please see respon	Response: Please see response above.		
Duke Energy		Distribution Providers and Generator Operators have significant responsibilities that require reliable means of communications with other entities, such as implementing load shedding and adjusting real and reactive power. The requirements for the Distribution Provider and Generator Operator should therefore be consistent with those for the Reliability Coordinator, Transmission Operator and Balancing Authority, namely, they should be required to designate Alternative Interpersonal Communication capability, to test this capability and to notify appropriate entities	

Organization	Yes or No	Question 4 Comment
		when its Interpersonal Communication capability has failed.
		Response: The RCSDT thanks you for your comment about requiring the Distribution Provider and Generation Operator to have the requirements similar to that of the Reliability Coordinator, Transmission Operator, and Balancing Authority. The standard, as proposed, has included the Distribution Provider and Generation Operator in accordance with the regulatory statements in Order No. 693, Pparagraphs 483, 491, 495, 496, and 503 which recognized the need for Distribution Providers and Generation Operators to have flexibility in meeting the communication capability requirements and not to burden smaller entities (i.e., DPs and GOPs) with the additional requirement of adding communication redundancy. No change made.
		The definition of Interpersonal Communication should also be expanded to clearly include the drafting team's intent that the capability is NOT for the exchange of data.
		With respect to the standard being tacit on "not for the exchange of data," the RCSDT believes this concern is addressed within the earlier IRO-014-1 – Procedures, Processes, or Plans to Support Coordination Between Reliability Coordinators standard and now the proposed IRO-014-2 – Coordination Among Reliability Coordinators adopted by the NERC Board of Trustees August 4, 2011. No change made.
Response: Please see the response:	onses above.	
Dominion		Dominion has no additional comments on COM-001-2, but does have the below comments on IRO-001-3:
		Dominion believes that our previous comment remains valid and the response provided by the SDT does not address all aspects of our concerns. Dominion suggests that the language of 'direction' be changed to 'Reliability Directive' to remain consistent with COM-002. Another alternative would be as written below;
		IRO-001-3 uses the term 'direct' in its purpose statement, R1, R2 and R3. To avoid confusion with a Reliability Directive (both for auditors and entities), we suggest the



Organization	Yes or No	Question 4 Comment
		following: To establish the authority of Reliability Coordinators to make requests of other entities to prevent an Emergency or Adverse Reliability Impacts to the Bulk Electric System.
		R1: Each Reliability Coordinator shall have the authority to act or request others to act (which could include issuing Reliability Directives) to prevent identified events or mitigate the magnitude or duration of actual events that result in an Emergency or Adverse Reliability Impacts.
		R2: Each Transmission Operator, Balancing Authority, Generator Operator, and Distribution Provider shall comply with its Reliability Coordinator's request unless compliance with the request cannot be physically implemented, or unless such actions would violate safety, equipment, regulatory or statutory requirements, or unless the TOP, BA, GOP or DP convey a business reason not to comply with the request but express that they will comply if a Reliability Directive is given.
		R3: Each Transmission Operator, Balancing Authority, Generator Operator, and Distribution Provider shall inform its Reliability Coordinator upon recognition of its inability to perform as requested in accordance with Requirement R2."
		Or we could cite Southwest Transmission Cooperative, Inc. comments which read "COM-002-3 R1 really compels the Reliability Coordinator to use a Reliability Directive for Emergencies and Adverse Reliability Impacts with the opening clause: "When a Reliability Coordinator, Transmission Operator, or Balancing Authority determines actions need to be executed as a Reliability Directive." What else could be more important for a Reliability Coordinator to issue a Reliability Directive than for an Emergency or Adverse Reliability Impact?
		Thus, not requiring the use of Reliability Directives for Adverse Reliability Impacts and Emergencies makes IRO-001-3 R1 and COM-002-3 R1 inconsistent. For clarity and consistency, IRO-001-3 Requirement R2 and R3 should also be clear that the responsible entities will respond to the Reliability Coordinator's Reliability Directives.

Response: The RCSDT thanks you for your support of COM-001-2. The standards COM-002-3 and IRO-001-3 were approved by

Consideration of Comments: Project 2006-06 (Draft 6)



Organization	Yes or No	Question 4 Comment
industry in July 2012; therefore No change made.	, the RCSDT is I	not able to respond to Dominion's comments and consider changes to the standard.
FirstEnergy		FE supports COM-001-2 and has no further comments.
		PLEASE NOTE: THE FOLLOWING COMMENTS RELATE TO COM-002-3 AND IRO-001-3 SINCE WE WERE NOT ABLE TO PROVIDE COMMENTS ON THE RECIRCULATION BALLOT AND WANTED TO EXPLAIN OUR REASONS FOR NOT SUPPORTING THOSE STANDARDS:
		Although we believe the team made significant improvements to the standard, and would support a 3-part communication standard, we believe the introduction of both COM-002-2 which utilizes Reliability Directives and COM-003-1 which utilizes Operating Communications cause confusion for system operators and may in fact be detrimental to reliability.
		We do not support two standards on three-part communication. We suggest, as we have in the past, that the subject of three-part communication be addressed in a single standard, and that the requirements be developed for simplicity. The industry is, and has been, using three-part communication for decades and although we agree it should be more consistently practiced and standardized, the required communications protocols should be simple while meeting the goal of BES reliability. Introducing complicated requirements and standards that have different definitions such as Reliability Directive and Operating Communication may cause the operator to hesitate when issuing directives in real-time and every second counts when a potential system emergency must be mitigated.
		Therefore, FE does not support the creation of both COM-003-1 nor the revisions to COM-002-2 and IRO-001-3 which introduce the "Reliability Directive" term and ask NERC to reevaluate the need to have two separate standards for three-part communication.

Response: The RCSDT thanks you for your support of COM-001-2. The standards COM-002-3 and IRO-001-3 were approved by industry in July 2012; therefore, the RCSDT is not able to respond to FirstEnergy's comments and consider changes to the standard.



Organization	Yes or No	Question 4 Comment
No change made.		
Indiana Municipal Power Agency		IMPA does not like the wording in R11 that states "mutually agreeable action for the restoration of its Interpersonal Communication capability." IMPA sees that entities will have to prove that the action taken by entities was "mutually agreeable" to the parties involved which will be very problematic. IMPA believes as long as the entity who owns the equipment is taking steps to get it back into service that is all that should be required by any requirement of this standard.
Response: The RCSDT addressed the concern about "mutually agreeable restoration time" by revising the phrase to "mutually agreeable action," which allows the applicable entities to reach consensus on the effort needed to restore communications. Additionally, working toward a mutually agreeable action also ensures that both parties understand the magnitude of the loss of their Interpersonal Communication capability and agree to the actions needed to restore and minimize the time the capability is unavailable. From a compliance standpoint, the Distribution Provider and Generation Operator that is working to restore its Interpersonal Communication capability is not out of compliance as far as the entity is meeting the requirement for taking action to restore its capability. It is practical on the part of the Balancing Authority or Transmission Operator to reach a mutual agreement, as it will facilitate restoring the capability. No change made.		
Texas Reliability Entity		In the Measures for R3 and R4 (M3 and M4), should the phrase "each adjacent Transmission Operator asynchronously AND synchronously connected" be changed to "each adjacent Transmission Operator asynchronously OR synchronously connected"?
		Response: The RCSDT agrees with your assessment in COM-001-2 and has changed the word in Measure M3 from "and" to "or" between the words "asynchronously and synchronously." Error correction made.
		In the VSLs for R3 it appears that "Reliability Coordinator" should be "Transmission Operator".
		Response: The RCSDT agrees with your assessment and has advised NERC staff that the VSL for Requirement R3 should have the entity "Reliability Coordinator" replaced with "Transmission Operator" in COM-002-3 to be consistent with the named entities



Organization	Yes or No	Question 4 Comment
		in Requirement R3. Error correction made.
		In the VSLs for R5 it appears that "Reliability Coordinator" should be "Balancing Authority".
		Response: The RCSDT appreciates you bringing awareness to this error in Requirement R5 VSL. The reference to "Reliability Coordinator" has been changed to Balancing Authority for Requirement R5 in both the High and Severe VSL. Error correction made.
		In the Severe VSL for R10 the phrase "failed to notify the identified entities identified" should probably be "failed to notify the entities identified".
		Response: The RCSDT appreciates you bringing awareness to this error in Requirement R10 VSL Severe column. The first occurrence of "identified" has been removed. Error correction made.
Response: Please see the above	e responses.	
Ingleside Cogeneration LP (Occidental Chemical in the ballot body)		Ingleside Cogeneration LP generally agrees with the modifications that the SDT has made to COM-001-2. However, we cannot vote to accept the standard unless requirement R10 is modified to include a minimum communications outage duration before consultation with the BA or TOP is necessary. This is similar to R10, which allows an outage to extend up to 30 minutes - thus avoiding the need for a notification that an insignificant interruption in service took place.
		The following language could be added to R11 as shown in the brackets below:
		R11. Each Distribution Provider and Generator Operator that experiences a failure of its Interpersonal Communication capability [that lasts 30 minutes or longer] shall consult each entity affected by the failure, as identified in Requirement R7 for a Distribution Provider or Requirement R8 for a Generator Operator, to determine a mutually agreeable action for the restoration of its Interpersonal Communication capability.



Organization	Yes or No	Question 4 Comment
Response: The RCSDT notes that the requirement allows flexibility for the Distribution Provider and Generator Operator to define what constitutes a failure of its Interpersonal Communication capability. The RCSDT believes it is inappropriate to establish a single defined threshold applicable to the numerous entities applicable to this standard. No change made.		
Essential Power, LLC		It is unclear what we are trying to accomplish in R11. If the intent is to coordinate the restoration of communications, then there should be an additional requirement that the GOP have a Communications Recovery Plan, and R11 should focus on the coordination and implementation of that Plan.
		If the intent is to maintain continuous communications, then there should be an additional requirement for the GOP to maintain an Alternative Interpersonal Communications capability, and R11 should focus on the coordination and implementation of that capability.
Generator Operator to consult vaction needed to restore the Intersection ensures that both parties under reliability; therefore, both need	vith its Balanci erpersonal Co stand the mag to agree on th ncing Authorit	mments. The intent of Requirement R11 is to require the Distribution Provider and ing Authority or Transmission Operator, as the case may be, to mutually agree on the mmunication capability. Additionally, working toward a mutually agreeable action also nitude of the loss of their Interpersonal Communication capability and impact to be actions needed to restore and minimize the time the capability is unavailable. It is y or Transmission Operator to reach a mutual agreement, as it will facilitate restoring
Manitoba Hydro		Manitoba Hydro would like additional clarification added to the definition of interpersonal communication. The definition should explicitly state that interpersonal communication does not data links (e.g. the ICCP data link). Also, does interpersonal communication include emails?
		Response: With respect to the standard being tacit on "not for the exchange of data," the RCSDT believes this concern is addressed within the earlier IRO-014-1 – Procedures, Processes, or Plans to Support Coordination Between Reliability Coordinators standard and now the proposed IRO-014-2 – Coordination Among Reliability Coordinators adopted by the NERC Board of Trustees August 4, 2011.

Organization	Yes or No	Question 4 Comment
		Additionally, Requirement R3 in IRO-010-1a – Reliability Coordinator Data Specification and Collection states: Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship. No change made.
		Under the Effective Date Section, the effective date language has a few issues in its drafting. It would be clearer to use the word 'following' as opposed to the word 'beyond' (and this would also be more consistent with the drafting of similar sections in other standards). The words 'the standard becomes effective' in the third line are not needed. The words 'made pursuant to the laws applicable to such ERO governmental authorities' may not be appropriate. It's not the laws applicable to the governmental authorities that are relevant, but the laws applicable to the entity itself. We would suggest wording like 'or as otherwise made effective pursuant to the laws applicable to the Balancing Authority'.
		Response: NERC staff note that the phrase: " the standard becomes effective" is a clarifying statement that needs to remain. This phrase would become more important if the heading "Effective Date" was not used. The phrase, "made pursuant to the laws applicable to such ERO governmental authorities" is a reference to governmental entities that have authority over BPS reliability within a jurisdictional territory; for example, in the United States, the Federal Energy Regulatory Commission; and in Canada, those parties delegated authority by Canadian provinces. Therefore, the statement is appropriate because the laws that are applicable to "such ERO governmental entities" will determine the effective date under the circumstances, not necessarily the laws that are applicable to functional entities. No change made.
		Also, ERO is not defined.
		Response: The RCSDT appreciates your comment. The language in the Effective Date section is standard language adopted by NERC and used throughout the body of



Organization	Yes or No	Question 4 Comment
		standards currently under development by teams. The RCSDT is not able to alter this language. No change made
		R11 and M11 - would suggest replacing 'action' with 'plan of action' or 'action plan'
		Response: The RCSDT believes the use of "action" is sufficient for Requirement R11 and Measure M11 and that adding "plan" does not add clarity. The RCSDT understands that whatever actions are mutually agreed upon will constitute a plan which the Distribution Provider or Generation Operator will use in the restoration of its Interpersonal Communication capability. No change made.
		M3 and M4 - the word 'and' between asynchronously and synchronously should more appropriately be 'or'
		Response: The RCSDT agrees with your assessment and has changed the word in Measure M3 from "and" to "or" between the words "asynchronously and synchronously". Error correction made.
		M10 - the semi colon after stamped should be deleted
		Response: The RCSDT agrees with your assessment and has added a colon at the appropriate location and changed the current colon to a comma for the Measures M9, M10, and M11. Error correction made.
		Compliance Section - Compliance Enforcement Authority is defined as CEA, but then both the acronym and the entire term is later used in the document. Should either not define, or use acronym consistently.
		Response: The RCSDT notes that the usage of the acronyms is consistent with the NERC style guide. No change made.
Response: Please see response:	s above.	
MISO		MISO respectfully submits that the subject matter of COM-001-1 is better addressed through an official NERC certification - that is, by having NERC certify that a registered

Organization	Yes or No	Question 4 Comment
		entity has the appropriate communications facilities - than through a formal Reliability Standard.
		Response: NERC maintains an Organization Certification Program, the goal of which is to ensure that organizations who apply to register or are registered to perform certain reliability functions deemed particularly crucial to the reliability of the bulk power system will meet or exceed certain minimum criteria (i.e., Reliability Standards) demonstrating they are capable of performing the tasks (i.e., Requirements) for these functions. The process for certification of organizations is included in the NERC Rules of Procedure, Section 500 and Appendix 5A. For example, the first paragraph of Section 500 – Organization Registration and Certification states: "The purpose of the Organization Registration Program is to clearly identify those entities that are responsible for compliance with the FERC approved reliability standards. Organizations that are registered are included on the NERC Compliance Registry (NCR) and are responsible for knowing the content of and for complying with all applicable reliability standards" The RCSDT has addressed the scope of the SAR in addressing communication requirements for entities through an open industry consensus process.
		Furthermore, the Reliability Standards surrounding communications should be performance based and specifically targeted toward testing, maintenance, and implementation of corrective actions when an issue arises or is otherwise detected. As a result of narrowing the focus of these standards, enforcement would then be tailored toward a Registered Entity's failure to take such actions when necessary, a direct benefit and correlation to enhancement of the reliability of the BES.
		Response: The RCSDT thanks you for your comment. Although this standard is not a Results-Based Standard (RBS), it achieves the need to require both Interpersonal Communication and Alternative Interpersonal Communication capability of the applicable entities to ensure reliable operations of the Bulk Electric System. The RCSDT believes the requirements achieve the needed level of communications to ensure reliable operations. No change made.



Organization	Yes or No	Question 4 Comment
		Under the currently proposed approach, the lack of a communication medium or a finding that a communication medium is "inadequate" or does not otherwise qualify under the standard would result in a non-compliance.
		Response: The RCSDT is not sure what is meant by a "lack of communication medium." The applicable entity either has the necessary Interpersonal Communication and Alternative Interpersonal Communication capability or does not. The requirements account for conditions where the capability is unavailable and has provided language to avoid situations of non-compliance due to the strict language construction of the requirements. No change made.
		Finally, MISO respectfully submits that:
		-Distribution Providers (DPs) and Generator Operators (GOPs) should have alternate communication media as well.
		Response: The RCSDT thanks you for your comment about requiring the Distribution Provider and Generation Operator to have the requirements similar to that of the Reliability Coordinator, Transmission Operator, and Balancing Authority. The standard, as proposed, has included the Distribution Provider and Generation Operator in accordance with the regulatory statements in Order No. 693, Paragraphs 483, 491, 495, 496, and 503 which recognized the need for Distribution Providers and Generation Operators to have flexibility in meeting the communication capability requirements and not to burden smaller entities (i.e., DPs and GOPs) with the additional requirement of adding communication redundancy. No change made.
		-If an alternate communication tool is tested once a month, there is no need to address deficiencies within two hours; six hours is sufficient in such instances.
		Response: The RCSDT contends the time frame has been through industry consensus, and two hours has been determined acceptable. No change made.
		-The standard should acknowledge that if more than two independent communication mechanisms are available, the VRF/VSL associated with missing a

Organization	Yes or No	Question 4 Comment
		timing requirement is minimal.
		Response: The RCSDT agrees that the applicable entities in Requirements R1, R3, and R6 are required to designate an Alternative Interpersonal Communication capability; however, this does not create a rationale for lowering the VRF/VSL. The VRF is a measure of the risk, if violated, and the VSL is a measure of non-compliance with the specific requirement.
		The RCSDT added the High VSL for Requirements R1 through R8 from draft 5 to draft 6 to account for greater granularity in a violation. For each applicable responsible entity named in each of the requirements, the number of entities for which it must have an Interpersonal Communication or Alternative Interpersonal Communication may vary significantly. The RCSDT believed that adding one additional VSL was an appropriate solution to account for variability in the number of entities. No change made.
		The SDT should require reporting times of failed mediums for GOP and DP similar to that for RC/BA/TOP.
		Response: The RCSDT thanks you for your comment about requiring the Distribution Provider and Generation Operator to have the requirements similar to that of the Reliability Coordinator, Transmission Operator, and Balancing Authority. The standard, as proposed, has included the Distribution Provider and Generation Operator in accordance with the regulatory statements in Order No. 693, Paragraphs 483, 491, 495, 496, and 503 which recognized the need for Distribution Providers and Generation Operators to have flexibility in meeting the communication capability requirements and not to burden smaller entities (i.e., DPs and GOPs) with the additional requirement of adding communication redundancy. No change made.
Response: Please see responses	above.	
Oncor Electric Delivery Company LLC		Oncor takes the position that the premise of R3 does not provide a reliability enhancement but may in effect; increase the risk to reliability by placing notification

Organization	Yes or No	Question 4 Comment
		requirements on the Transmission Operator that could best be managed by the Reliability Coordinator. In fact,
		Oncor takes the position that as a Transmission Operator, it is being placed into the position of having to continually validate the registration status of every entity that may be registered as a Distribution Provider, Transmission Operator, and Generator Operator within its Transmission Operator Area. Oncor takes the position that since each of these entities are in the applicability section of the standard, the Distribution Provider, Transmission Operator, and Generator Operator should be responsible for seeking Interpersonal Communication capability with the Transmission Operator and the Transmission Operator should then reciprocate Interpersonal Communication capability in response to their initial request. This eliminates an unnecessary compliance obligation of the Transmission Operator to manage "who is" and "who is not" registered as a Generator Operator, Distribution Provider or Transmission Operator.
		Response: The RCSDT notes this is not within the scope of the SAR. No change made.
		Oncor recommends the following change to the standard language:
		Remove 3.3 & 3.4 because R7 and R8 already cover the GO and DP seeking Interpersonal Communication capability with the Transmission Operator.
		Response: The RCSDT thanks you for your comment and notes that the standard is addressing FERC directives concerning the Generation Owner and Distribution Provider. Entities on each end of the communication capability must have a responsibility to have communications. No change made.
		Oncor also takes the position that the Reliability Coordinator (RC) is in the best position and not the Transmission Operator to make extensive notifications on a broad basis in the event of a failure of its Interpersonal Communication. In accordance with that position, the Transmission Operator should make a single notification to the RC, and the RC would then make the notification to all impacted



Organization	Yes or No	Question 4 Comment
		entities in the event of the failure of the Transmission Operator's Interpersonal Communication.
		Response: The RCSDT notes this implementation is entity-specific and is not achievable by all entities. Each entity is required to make the notifications as applicable to the requirements. No change made.
		Oncor proposes the following language for R10
		"R10. Each Transmission Operator shall notify the Reliability Coordinator and the Balancing Authority within 60 minutes of the detection of a failure of its Interpersonal Communication capability that lasts 30 minutes or longer.
		After notification by any Transmission Operator, the Reliability Coordinator shall immediately notify entities as identified in Requirements R1, R3, and R5 of any Transmission Operator's detection of a failure of its Interpersonal Communication capability that lasts 30 minutes or longer.
		Each Reliability Coordinator and Balancing Authority shall notify entities as identified in Requirements R1, R3, and R5 within 60 minutes of the detection of a failure of its own Interpersonal Communication capability that lasts 30 minutes or longer."
		Response: The RCSDT disagrees with the method. Each entity is required to make the notifications as applicable to the requirements. No change made.
Response: Please see the above	e responses.	
Central Lincoln		Prior Central Lincoln Comment
		1) The new requirement presents us with a paradoxical situation. The communication has failed, so we must consult; yet consultation requires communication. We note that the SDT used the word "any", implying that multiple communication paths are required. The reality of the situation at Central Lincoln, due to our remote location, is that a single back hoe incident at the right location can take out all of our of our communication capability (including the terrestrial portion of the cellular networks)



Organization	Yes or No	Question 4 Comment
		with our BA/TO; making this requirement impossible to meet for this circumstance using our present capabilities.
		Prior RCSDT Response
		1) The RCSDT appreciates your comment and has made clarifying changes by removing the phrase "any of" in COM-001, R11. Additionally, the RCSDT made a clarifying change to indicate the DP and GOP only need to consult with the entity affected by the failure. Furthermore, R11 addresses the direction given in Order 693 that DP and GOP entities do not necessarily need to have Alternative Interpersonal Communication capability. The requirement allows flexibility in "consult with" by not naming the method. If all communications are out, then the DP or GOP may have to meet the requirement by an in-person consultation.
		New Central Lincoln Response
		1) Thank you for the changes made. We realize that in-person consultation is an option, but find it not too hard to imagine the same event that disrupts communications might also block roads. We don't believe entities should be found non-compliant and sanctioned for events beyond their control.
		Response: The RCSDT understands the paradoxical situation presented here. The standard addresses the essential communication capability needed to operate the Bulk Electric System reliably. No change made.
		Prior Central Lincoln Comment
		2) We also note that no time limit was indicated. Most interruptions are brief, and fixed before consultation could reasonably take place. CEAs will be finding entities non-compliant for quickly fixing problems at their end without first consulting to ensure the restoration time was agreeable. To avoid non-compliance, entities will be forced to delay repairs while they investigate alternative communication paths for consultation purposes. We fail to see how such an outcome improves reliability.
		Prior RCSDT Response

Organization	Yes or No	Question 4 Comment
		2) The DP and GOP are only required to have Interpersonal Communication capability. If the DP or GOP restores its Interpersonal Communication capability before it could reasonably contact the affected entity by another method, there is no failure to comply. The DP or GOP could then consult with the affected entity to determine a mutually agreeable action. In this case, the RCSDT believes the "action" would then be the entities acknowledging the failure and the repair; therefore, no mutually agreeable action is needed. The RCSDT recognizes there is no way to account for all the various circumstances in a failure. To comply, the DP and GOP are still required to consult the entity which the failure affected regardless of whether the Interpersonal Communication capability was restored or is still failed. No change made.
		New Central Lincoln Response
		2) If consultation after restoration is acceptable, we suggest that this be made clear in the requirement. Presently it is not at all clear, and there is no accompanying guidance document to suggest so. We also remain unclear what reliability benefit would result from such a consultation following restoration. While accounting for all the various failures might be impossible, we would like to see a few of the more common ones discussed in a guidance document.
		Response: The RCSDT notes that the requirement allows flexibility for the Distribution Provider and Generator Operator to define what constitutes a failure of its Interpersonal Communication capability. The RCSDT believes it is inappropriate to establish a single-defined threshold or attempt to make a list of the various failures which may potentially affect the numerous entities applicable to this standard. No change made.
		Prior Central Lincoln Comment
		3) The new requirement is one sided, requiring the DP and GOP to consult with no corresponding requirement for the TO or BA to have personnel available for such a consultation. Consultation failure or failure to mutually agree due to actions or



Organization	Yes or No	Question 4 Comment
		inactions on the part of the TO or BA should not result in an enforcement action against the DP or GOP, yet that is how the requirement is written.
		Prior RCSDT Response
		3) The RCSDT notes that once the failure has been detected, the responsible entity must make the consultation with the BA or TOP; that relieves the compliance burden. While the RCSDT understands your concern about single points of failure, the question becomes should this relieve the DP or GOP of the requirement for having Interpersonal Communication capabilities. No change made.
		New Central Lincoln Response
		3) The requirement remains one-sided. If a consultation effort fails due to actions or inactions taken by the BA/TO, the DP or GOP is the only entity that can be found non-compliant.
		Response: The RCSDT addressed the concern about "mutually agreeable restoration time" by revising the phrase to "mutually agreeable action," which allows the applicable entities to reach consensus on the effort needed to restore communications. Additionally, working toward a mutually agreeable action also ensures that both parties understand the magnitude of the loss of their Interpersonal Communication capability and agree to the actions needed to restore and minimize the time the capability is unavailable. From a compliance standpoint, the Distribution Provider and Generation Operator that is working to restore its Interpersonal Communication capability is not out of compliance as far as the entity is meeting the requirement for taking action to restore its capability. It is practical on the part of the Balancing Authority or Transmission Operator to reach a mutual agreement, as it will facilitate restoring the capability. No change made.
		Prior Central Lincoln Comment
		4) The new requirement fails to add any "clarity" to the other requirements, and we don't see that the stakeholders thought there was a problem with DP/GOP obligation clarity. Instead, it adds new obligations with no justification for how they enhance



Organization	Yes or No	Question 4 Comment
		reliability. We suggest removing the requirement.
		Prior RCSDT Response
		4) Based on the RCSDT's understanding of the comments received on the previous posting, the industry desired additional clarity on specifically what communication capabilities the DP and GOP were required to have. There was confusion that the standard did not specifically say that the DP and GOP were required to have Alternative Interpersonal Communication capabilities. R11 clarifies that a DP and GOP are not required to have Alternative Interpersonal Communication capability if the DP or GOP consult with their TOP or BA, whichever is applicable in the given situation, and they mutually agree that the restoration action does not adversely impact the reliability of the BES. No change made.
		New Central Lincoln Response
		4) We disagree that R11 clarifies anything regarding Alternative Interpersonal Communication capabilities; the requirement says nothing on the matter. If other requirements remain unclear, we suggest they be clarified within those requirements. We ask that R11 be removed. Alternatively, we suggest that a plan for communication failure be developed by the affected entities prior to a failure, applicable to both the BA/TO and DP/GOP.
		Response: The RCSDT contends the desired result is restoring the capability and that the most appropriate and measureable way to address the loss of the Distribution Provider or Generation Operator's capability is to require the entities to communicate the action taken to restore the capability. No change made.
		Prior Central Lincoln Comment
		5) As stated in our prior comments, we continue to have problems with COM-002, R2 and R3 as written. The SDT's answer ("It is the expectation that an issuer of a Reliability Directive would request a return call by the Distribution Provider operating personnel, then issue the Reliability Directive") addresses our concern perfectly, and we would agree with such an expectation. Unfortunately, the expressed expectation



Organization	Yes or No	Question 4 Comment
		is not in the proposed standard or even in a proposed guideline for the standard.
		Prior RCSDT Response
		5) The RCSDT believes this is a process or procedure question that should be determined by the entity in how it handles communication with the RC. The standard, as written does, not preclude the entity from having a procedure. No change made.
		New Central Lincoln Response
		5) We agree that this is a procedure issue, but disagree that the procedure lies with the entity receiving the Reliability Directive. The SDT's words inside the quotation marks above state it is the issuer of the Directive that should request a return call. Procedures like this, in order to ensure the Directive gets to the party who understands it and can take the needed action, are the responsibility of the issuer. If reliability is at risk, it is little to ask that issuers of Reliability Directives be required to attempt to reach the proper party prior to identifying, delivering the directive, and asking for repetition.
		Response: The standard COM-002-3 was approved by industry in July 2012; therefore, the RCSDT is not able to respond to Central Lincoln's comments and consider changes to the standard. No change made.
Response: Please see responses	s above.	
Liberty Electric Power		R11 remains an issue even with the revision. The purpose of R11 should be to inform the BA and TO of a loss of interpersonal communications capability so that the BA or TO can react effectively to grid conditions in an emergency. The methods of repair for generator telephone and data lines are properly the business decisions of the generator, and there is no benefit to the reliability of the BES if a standard requires a generator to attempt to gain consensus from the BA and TO on his repair actions.
		Taking the time to discuss a "mutually agreed action" will delay the start of repairs,

Organization	Yes or No	Question 4 Comment
		and lengthen the time of a communications outage as generators first must discuss the issue with the BA and TO instead of initiating the action on their own and informing those entities of the failure. Further, failure to follow a mutually agreed action plan could become a topic of exploration for audit staff. As telecommunications repairs are generally not in the scope of expertise of electrical generators, this places the entities at the mercy of contractor repair schedules, making following any mutually agreed action problematic.
		Response: The RCSDT notes that the purpose of consulting with the appropriate entities ensures those entities are aware of the loss of Interpersonal Communication capabilities and will have the necessary information to adjust reliability operations accordingly. There is nothing in Requirement R11 preventing the Distribution Provider or Generator Operator from taking action beforehand. No change made.
		Further, there is no duration trigger on R11, as opposed to the RC/TO/BA requirement in R10. This forces the generator to inform the listed entities even of losses of capability which last a handful of seconds. If a small generator has a single line into the control room, and the control room operator is on the phone to the TOP, does he then have to inform the TO and BA at the end of the call that they would have received a busy signal? If the operator knocks the phone from the cradle, is the requirement to inform triggered? In a strict reading of the language, it would be.
		Suggested rewrite of R11:
		"Upon discovery of an unresolved loss of interpersonal communications which has the potential to last more than 15 minutes, the GOP shall inform the entities listed in R8 of the status of interpersonal communications. The GOP shall initiate the process to restore the interpersonal communications, and inform the entities listed in R8 of the restoration of communications when repairs are complete."
		Response: The RCSDT notes that the requirement allows flexibility for the Distribution Provider and Generator Operator to define what constitutes a failure of its Interpersonal Communication capability. The RCSDT believes it is inappropriate to



Organization	Yes or No	Question 4 Comment
		establish a single-defined threshold applicable to the numerous entities applicable to this standard. No change made.
Response: Please see response	es above.	
Tacoma Power		R9 - The Standard requires that when there is a failure to a primary or alternate communication system that action is initiated within 2 hours of the communication failure. It is not clear what the term "action" means. Tacoma requests clarification for what "actions" are intended by the standard.
		Response: The RCSDT notes that the requirement is for the entity to "initiate action," which may include, but is not limited to, notifying or requesting repair to restore the capability. The option is to designate an Alternative Interpersonal Communication capability. Additionally, there is no time constraint for the Interpersonal Communication capability, only the AIC. No change made.
		R10 - Interpersonal Communication is defined as "any medium that allows two or more individuals to interact, consult, or exchange information". As it is written, R10 requires an entity to contact another entity "within 60 minutes of the detection of a failure of its Interpersonal Communication capability that lasts 30 minutes or longer". This contact may not be possible in a situation where there is "a failure of Interpersonal Communication capability".
		Response: The RCSDT notes that the responsible entities named in Requirement R10 are also required to have a designated Alternative Interpersonal Communication capability and should be able to make the necessary notifications. No change made.
		R11 – The lack of a time line in R11 seems inconsistent with the time line requirements in R9 and R10. If there is a communication failure affecting the GO and DP then the standard only requires that they agree on an action to restore communication but does not assign a timeline.
		Response: The RCSDT notes that the requirement allows flexibility for the Distribution Provider and Generator Operator to define what constitutes a failure of



Organization	Yes or No	Question 4 Comment
		its Interpersonal Communication capability. The RCSDT believes it is inappropriate to establish a single-defined threshold applicable to the numerous entities applicable to this standard. No change made.
Response: Please see responses	s above.	
LG&E and KU Services		Regarding COM-001-2 and proposed definitions, LG&E and KU Services recommends changing the terms being defined from "Interpersonal Communications" and "Alternative Interpersonal Communication" to "Means for Interpersonal Communication." A communication is an exchange of information, not a medium. The medium is simply the means. LG&E and KU Services Company further recommend that each requirement be rewritten with these new defined terms as appropriate and that the word "capabilities" currently following the defined terms be removed from each of the requirements.
		Response: The RCSDT notes that commenters recommended using the terms, such as, "primary," "secondary," "device," "means," and "medium" with regard to the proposed definitions. The RCSDT thanks you for your suggestion; however, the requirements are for "capability" and adding such proposed terms is not needed to achieve the necessary clarity. No change made.
		We suggest the definition for "Means for Interpersonal Communication" be: "A medium utilizing electromagnetic energy that allows two or more individuals to interact, consult or exchange information." We suggest the definition for "Alternative Means for Interpersonal Communication" be: "Any Means for Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Means for Interpersonal Communications used for day-to-day operation." Regarding R1 through R10, it is unclear what "shall have Interpersonal Communications capability" means. That could mean that the responsible entity simply has to have an IC capability that is different from our designated AIC capability (as R1 through R8 suggest). That could also mean,



Organization	Yes or No	Question 4 Comment
		differently, that the responsible entity has to designate an IC capability (as R10 suggests). It is also unclear whether the IC capability can change, e.g. from email to land line. There is nothing in the Standard that makes this clear. Regarding R11, as written it is unclear who would be responsible for non-compliance if the consulting entities did not "determine a mutually agreeable action for the restoration of its Interpersonal Communication capability."
		Response: The RCSDT believes the definitions and requirements are clear and does not agree with the proposed definition changes. The requirements and definition allow the entity to determine the medium. No change made.
Response: Please see responses	above.	
City of Tallahassee (TAL)		TAL has no comments on COM-001-2.
		However, for COM-002-3, under Data Retention, the second bullet requires the BA, TOP, GOP, and DP to retain evidence for R1, M1; however, R1 is not applicable to the GOP or DP. This should read R2, M2.
		Response: The RCSDT agrees with your assessment that R1 and M1 should be R2 and M2. The RCSDT has advised NERC staff of the typo in COM-002-3.
		Also, there is room for debate on the clarity of the VSLs for R3. Specifically, the use of the word "accurately" could be interpreted to mean "verbatim" in cases where varying verbiage results in the same understanding and action between the parties, and therefore no re-issuance of the directive is required in the eyes of the issuer.
		Response: The standard COM-002-3 was approved by industry in July 2012; therefore, the RCSDT is not able to respond to the City of Tallahassee's comment to consider changes to the standard. No change made.
Response: Please see responses	above.	
American Electric Power		The definition of Alternative Interpersonal Communication is "Any Interpersonal



Organization	Yes or No	Question 4 Comment
		Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation." Does the Alternative Interpersonal Communication have to be a different technology? For example, if a satellite phone is used, but it calls the same land-line on the other end, does this qualify as Alternative Interpersonal Communication?
		Response: The proposed definitions only specify that the alternative has to utilize a separate medium. The standard is not technology dependent and allows entities flexibility in selecting the capability appropriate for its need. No change made.
		How does a TOP notify a DP of a failure in its Interpersonal Communications capability per R10, if it there is no Alternative Interpersonal Communication required? Within Requirement 10, the entities to be notified should not reference R1, R3, and R5 but should instead reference R2, R4, and R6 respectively. This change is necessary because the requirements we are referring to are those that have Alternative Interpersonal Communications. You cannot expect notification to entities where an Alternative Interpersonal Communication does not exist.
		Response: The RCSDT notes that Requirement R10 applies to the TOP and that the TOP is required to have AIC per Requirement R4. The RCSDT disagrees with the suggested change in the requirement references because the current references are specific to the entities that apply to the Interpersonal Communication capability. No change made.
		With regard to the requirement references in R10, the RCSDT agrees with the ambiguity in both the Requirement R10 and Measure M10 and proposes to clarify Requirement R10, Measure M10, and R10 VSL by inserting the word "respectively." For example, adding the word "respectively" means that the Reliability Coordinator in R1 is not required to notify the entities identified in Requirement R3 or R5. The RCSDT intended the requirements to map to the entity. Clarifying changes made.



Organization	Yes or No	Question 4 Comment
Exelon Corporation and its affiliates		The definition of Interpersonal Communication requires further clarification. The use of the term "Any medium" opens the definition up to broad interpretation. It's not clear whether the definition means to apply to the point of communication owned, managed, and operated by the entity, or the total communications pathway? For example if entity A's phone system is working fine, but Entity B is experiencing trouble, does Entity A have a compliance concern if Entity B experiences a communication breakdown on their end of the medium?
		Please provide greater insight on the intended compliance obligation and consider the following revision to the definition:
		Interpersonal Communication: Any medium, owned, managed, or operated by the applicable entity, that allows two or more individuals to interact, consult, or exchange information.
		Response: The RCSDT notes that each requirement does not prescribe the "how," "why," "who," or "where" concerning the failure or loss of its Interpersonal Communication (or Alternative Interpersonal Communication) capability. It is the responsibility of the applicable entity to perform the "what" of each requirement. There is no compliance risk based on the "how," "why," "who," or "where." No change made.
		The RCSDT appreciates the suggested changes to the defined term. The suggestion introduces specifics which make the definition less flexible and more prescriptive. Such a change could potentially be invalidated by the way an entity operates in the future. No change made.
		R9 provides ambiguous instruction for the resolution process surrounding tests and failures of Alternative Interpersonal Communication capability. Please confirm whether the intent of the requirement is to initiate repairs within two hours, or to effect repairs within two hours, with the alternate option being to designate a replacement Alternative Interpersonal Communication if repairs cannot be completed within two hours.



Organization	Yes or No	Question 4 Comment
		Response: The RCSDT notes that the requirement is for the entity to "initiate action," which may include, but is not limited to, notifying or request repair to restore the capability. The option is to designate an Alternative Interpersonal Communication capability. No change made.
		R10 has similar ambiguity, referencing a 60 minute notification timeframe requirement upon the detection of a failure lasting 30 minutes or longer. Please confirm the intended start of the requirement notification. Does the clock for notification begins at the point of failure, at the point of discovery, or at the point that the failure is discovered to have been effective for 30 minutes or greater? Thank you for the opportunity to comment.
		Response: The RCSDT notes the 60-minute clock starts at the point the failure has reached the 30-minute threshold. This is to allow time for intermittent failures to be resolved. No change made.
Response: Please see the response	onses above.	
ISO/RTO Standards Review Committee		The IRC continues to believe that these a certification types of requirements and that they do not belong in a standard.
		The SRC believes that the requirement to have a medium to communicate should be required to be certified.
		Response: NERC maintains an Organization Certification Program, the goal of which is to ensure that organizations who apply to register or are registered to perform certain reliability functions deemed particularly crucial to the reliability of the bulk power system will meet or exceed certain minimum criteria (i.e., Reliability Standards) demonstrating they are capable of performing the tasks (i.e., Requirements) for these functions. The process for certification of organizations is included in the NERC Rules of Procedure, Section 500 and Appendix 5A. For example, the first paragraph of Section 500 – Organization Registration and Certification states: "The purpose of the Organization Registration Program is to clearly identify those



Organization	Yes or No	Question 4 Comment
		entities that are responsible for compliance with the FERC approved reliability standards. Organizations that are registered are included on the NERC Compliance Registry (NCR) and are responsible for knowing the content of and for complying with all applicable reliability standards" The RCSDT has addressed the scope of the SAR in addressing communication requirements for entities through an open industry consensus process. No change made.
		When you are operating as a registered entity, the requirements should be performance based such as taking corrective actions and if you fail to communicate for any reason you will be found non-compliance. The lack of a communication medium should not be a defense for non-compliance of the performance based standards.
		Response: The RCSDT thanks you for your comment. Although this standard is not a Results-Based Standard (RBS), it achieves the need to require both Interpersonal Communication and Alternative Interpersonal Communication capability of the applicable entities to ensure reliable operations of the Bulk Electric System. The RCSDT believes the requirements achieve the needed level of communications to ensure reliable operations. No change made.
		The SDT should require reporting times of failed mediums for GOP and DP similar to that for RC/BA/TOP.
		Response: The RCSDT notes that the requirement allows flexibility for the Distribution Provider and Generator Operator to define what constitutes a failure of its Interpersonal Communication capability. The RCSDT believes it is inappropriate to establish a single-defined threshold applicable to the numerous entities applicable to this standard. No change made.
Response:		
ISO New England Inc		The ISO-NE continues to believe that these a certification types of requirements and that they do not belong in a standard.

Organization	Yes or No	Question 4 Comment
		ISO-NE believes that the requirement to have a medium to communicate should be required to be certified.
		Response: NERC maintains an Organization Certification Program, the goal of which is to ensure that organizations who apply to register or are registered to perform certain reliability functions deemed particularly crucial to the reliability of the bulk power system will meet or exceed certain minimum criteria (i.e., Reliability Standards) demonstrating they are capable of performing the tasks (i.e., Requirements) for these functions. The process for certification of organizations is included in the NERC Rules of Procedure, Section 500 and Appendix 5A. For example, the first paragraph of Section 500 – Organization Registration and Certification states: "The purpose of the Organization Registration Program is to clearly identify those entities that are responsible for compliance with the FERC approved reliability standards. Organizations that are registered are included on the NERC Compliance Registry (NCR) and are responsible for knowing the content of and for complying with all applicable reliability standards" The RCSDT has addressed the scope of the SAR in addressing communication requirements for entities through an open industry consensus process. No change made.
		When you are operating as a registered entity, the requirements should be performance based such as taking corrective actions and if you fail to communicate for any reason you will be found non-compliance. The lack of a communication medium should not be a defense for non compliance of the performance based standards.
		Response: The RCSDT thanks you for your comment. Although this standard is not a Results-Based Standard (RBS), it achieves the need to require both Interpersonal Communication and Alternative Interpersonal Communication capability of the applicable entities to ensure reliable operations of the Bulk Electric System. The RCSDT believes the requirements achieve the needed level of communications to ensure reliable operations. No change made.
		The SDT should require reporting times of failed mediums for GOP and DP similar to



Organization	Yes or No	Question 4 Comment		
		that for RC/BA/TOP.		
		Response: The RCSDT notes that the requirement allows flexibility for the Distribution Provider and Generator Operator to define what constitutes a failure of its Interpersonal Communication capability. The RCSDT believes it is inappropriate to establish a single-defined threshold applicable to the numerous entities applicable to this standard. No change made.		
Response: Please see responses above.				
SERC OC Standards Review Group		The SERC OC SRG would like to thank the Standard Drafting Team for their service."The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Standards Review group only and should not be construed as the position of SERC Reliability Corporation, its board or its officers."		
Response: The RCSDT thanks you for your support.				
SPP Standards Review Group		There are a couple of cut & paste errors in the VSLs for R3 and R5.		
		In R3, Reliability Coordinator in the High and Severe VSLs should be replaced with Transmission Operator.		
		Response: The RCSDT appreciates you bringing awareness to this error in Requirement R3 VSL. The reference to "Reliability Coordinator" has been changed to Transmission Operator for Requirement R3 in both the High and Severe VSL. Error correction made.		
		In R5, Reliability Coordinator in the High and Severe VSLs should be replaced with Balancing Authority.		
		Response: The RCSDT appreciates you bringing awareness to this error in Requirement R5. The reference to "Reliability Coordinator" has been changed to Balancing Authority for Requirement R5 in both the High and Severe VSL. Error correction made.		



Organization	Yes or No	Question 4 Comment		
Response: Please see responses above.				
PacifiCorp		N/A		
Arizona Public Service Company		None		

END OF REPORT