

## **Consideration of Comments**

Project 2007-02 Operating Personnel Communications Protocols

The Project 2007-02 Drafting Team thanks all commenters who submitted comments on the proposed draft COM-002-4 (Operating Personnel Communications Protocols) standard. These standards were posted for a 30-day public comment period from January 2, 2014 through January 31, 2014. Stakeholders were asked to provide feedback on the standards and associated documents through a special electronic comment form. There were 70 sets of comments, including comments from approximately 185 different people from approximately 125 companies representing all 10 Industry Segments as shown in the table on the following pages.

As a result of select industry stakeholder comments, the Operating Personnel Communications Protocols Standards Drafting Team (OPCP SDT) made minor, non-substantive changes to COM-002-4 after the most recent comment and ballot period in order to clarify the OPCP SDT's intent and better align the language in the measures with the requirements. Requirement R4.1 was altered from "as appropriate" to "as deemed appropriate by the entity" in order to highlight the OPCP SDT's intent. In Measure M2 the words "its initial" were added to the sentence "shall provide its initial training records . . ." in order to align the language in Measure M2 with the language in Requirement R2. Measure M4 was altered to include the phrase "as part of its assessment" and "of any corrective actions taken" within the sentence "The entity shall provide, as part of its assessment, evidence of any corrective actions taken." Lastly, Measure M6 and M7 were changed to add the parenthetical "(if an entity has such recordings)" after the words "time-stamped recordings," and the second entry for "time-stamped recordings" was removed due to redundancy.

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

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.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The appeals process is in the Standard Processes Manual: <a href="http://www.nerc.com/comm/SC/Documents/Appendix">http://www.nerc.com/comm/SC/Documents/Appendix</a> 3A StandardsProcessesManual.pdf



## **Index to Questions, Comments, and Responses**

1.	Do you agree that that the COM-002-4 standard addresses the NERC Board	
	of Trustees November 19, 2013 Resolution? If not, please explain in the	
	comment area	15
2.	Do you agree that COM-002-4 addresses the August 2003 Blackout Report	
	Recommendation number 26, and FERC Order 693? If not, please explain in	
	the comment area	30
3.	Do you agree with the VRFs and VSLs for the Requirements? If not, please	
	explain	44
4	Do you have any additional comments? Please provide them here	



## 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		Org	anization			Regi	stered	Ballo	t Bod	y Segr	ment		
						1	2	3	4	5	6	7	8	9	10
1.	Group	Stuart Goza		SERC OC Review Gr	oup	Х		Х		Х	х				
4	Additional Member	Additional Organization Re	egio	n Segment Selection											
1. V	Villiam Berry	OMU SE	ERC	3											
2. F	tene Free	Santee Cooper SE	ERC	1, 3, 5, 6											
3. T	im Hattaway	PowerSouth SE	ERC	1, 5											
4. L	ouis Slade	Dominion SE	ERC	1, 3, 6											
5. C	an Roethemeyer	Dynegy SE	ERC	5											
6. J	ohn Bussman	AECI SE	ERC	1, 3, 5, 6											
7. S	Scott Brame	NCEMC SE	ERC	1, 3, 4, 5											
2.				North American Ge	nerator Forum -										
	Group	Allen Schriver		Standards Review T	eam (NAGF-SRT)					Χ					



G	roup/Individual	Commenter		0	rganiz	ation				Regi	stere	d Rall	ot Bod	lv Sagi	ment		
- Gi	oup/marvidual	Commenter			Igailiz					IVC 81	1	T Dail	J. DOG	y Jegi		I	
								1	2	3	4	5	6	7	8	9	10
,	Additional Member	Additional Organization	Region Segme	ent Sele	ction												
1. [	Dana Showalter e	ON Climate & Renewables	ERCOT 5														
2. \	William Shultz S	Southern Company	SERC 5														
3.	Group	David Dockery	Associated JRO00088	d Electr	ic Coo	perative, Inc	•	Х		Х		Х	Х				
	Addition	al Member Ac	Iditional Organi	ization F	Region	Segment Selec	tion										
1. (	Central Electric Power	Cooperative		5	SERC	1, 3											
2. ł	KAMO Electric Cooper	rative		5	SERC	1, 3											
3. 1	M & A Electric Power (	Cooperative		9	SERC	1, 3											
4. 1	Northeast Missouri Ele	ectric Power Cooperative		5	SERC	1, 3											
5. 1	N.W. Electric Power C	ooperative, Inc.		5	SERC	1, 3											
6. 8	Sho-Me Power Electric	Cooperative		5	SERC	1, 3											
4.	Group	Joshua Andersen	Salt River	Project				Х		Х		Х	Х				
No	Additional Respon	ses															
5.	Group	Guy Zito	Northeast	Power	Coord	linating Counc	il										Х
	Additional Member	Additional Orgar	nization	Pagion	Soam	ent Selection											
1.	Alan Adamson	New York State Reliability		NPCC		ent Selection											
2.	David Burke	Orange and Rockland Utili		NPCC													
3.	Greg Campoli	New York Independent Sy		NPCC													
4.	Sylvain Clermont	Hydro-Quebec TransEnerg	•	NPCC													
5.	Chris de Graffenried	Consolidated Edison Co. of	-		1												
6.	Gerry Dunbar	Northeast Power Coordina	•		10												
7.	Mike Garton	Dominion Resources Serv	•	NPCC	5												
8.	Kathleen Goodman	ISO - New England		NPCC	2												
9.	Michael Jones	National Grid		NPCC	1												
10.	Mark Kenny	Northeast Utilities		NPCC	1												
11.	Christina Koncz	PSEG Power LLC		NPCC	5												
12.	Helen Lainis	Independent Electricity Sy	stem Operator	NPCC	2												
13.	Michael Lombardi	Northeast Power Coordina	ting Council	NPCC	10												



Gr	oup/Individual	Commenter		0	rganiza	tion			Regi	stere	d Ballo	ot Bod	y Segr	nent		
							1	2	3	4	5	6	7	8	9	10
14.	Alan MacNaughton	New Brunswick Power	•	NPCC	9		•		•		•					•
15.	Bruce Metruck	New York Power Authority		NPCC	6											
16.	Silvia Parada Mitche	II NextEra Energy, LLC		NPCC	5											
17.	Lee Pedowicz	Northeast Power Coordinatin	g Counc	il NPCC	10											
18.	Robert Pellegrini	The United Illuminating Comp	pany	NPCC	1											
19.	Si Truc Phan	Hydro-Quebec TransEnergie		NPCC	1											
20.	David Ramkalawan	Ontario Power Generation, Ir	nc.	NPCC	5											
21.	Brian Robinson	Utility Services		NPCC	8											
22.	Ayesha Sabouba	Hydro One Networks Inc.		NPCC	1											
23.	Brian Shanahan	National Grid		NPCC	1											
24.	Wayne Sipperly	New York Power Authority		NPCC	5											
	Ben Wu	Orange and Rockland Utilitie	s Inc.	NPCC	1											
26.	Peter Yost	Consolidated Edison Co. of N	New York	k, Inc. NPCC	3											
6.	Group	Russel Mountjoy	NERC	Standards I	Review	Forum	Х	Χ	Χ	Χ	Х	Х				
	Additional Member	Additional Organization	Regio	n Segment S	Selection											
1.	Alice Ireland	Xcel Energy	MRO	1, 3, 5, 6												
2.	Chuck Wicklund	Otter Tail Power	MRO	1, 3, 5												
3.	Dan Inman	Minnkota Power Coop	MRO	1, 3, 5, 6												
4.	Dave Rudolph	Basin Electric	MRO	1, 3, 5, 6												
5.	Kayleigh Wilkerson	Lincoln Electric	MRO	1, 3, 5, 6												
6.	Jodi Jensen	WAPA	MRO	6												
7.	Joseph Depoorter	Madison Gas & Electric	MRO	3, 4, 5, 6												
8.	Ken Goldsmith	Alliant Energy	MRO	4												
9.	Mahmood Safi	Omaha Public Power District	MRO	1, 3, 5, 6												
10.	Marie Knox	MISO	MRO	2												
11.	Mike Brytowski	Great River Energy	MRO	1, 3, 5, 6												
12.	Randi Nyholm	Minnesota Power	MRO	1, 5												
	Scott Bos	Muscatine Power & Water	MRO	1, 3, 5, 6												
14.	Scott Nickels	Rochester Public Utilities	MRO	4												
15.	Terry Harbour	MidAmerican Energy	MRO	1, 3, 5, 6												
	Tom Breene	Wisconsin Public Service	MRO	3, 4, 5, 6												



				1										
Gr	oup/Individual	Commenter	Organization				Reg	istere	d Ball	ot Bod	ly Seg	ment		
					1	2	3	4	5	6	7	8	9	10
17.	Tony Eddleman	Nebraska Public Power Distric	tt MRO 1, 3, 5											
7.	Group	Kaleb Brimhall	Colorado Springs Utilities		Χ		Х		Х	Х				
No.	Additional Respo	nses		,		•	•		•					
8.	·		Southern Company; Southern Company Services,Inc; Alabama Power Company Georgia power Company; Gulf Power Company; Mississippi Power Company Southern Company Generation and Er	, y; /;										
	Group	Marcus Pelt	Marketing		Χ		Х		Х	Χ				
No.	Additional Respo	nses	-			•	•	•	•	•				
9.	Group	Frank Gaffney	Florida Municipal Power Agency		Х		Х	Х	Х	Х				
2. J 3. C 4. L 5. C 6. F 7. S 8. E	Tim Beyrle  Jim Howard  Greg Woessner  Lynne Mila  Cairo Vanegas  Randy Hahn  Stanley Rzad  Don Cuevas  Mark Schultz	Kissimmee Utility Authority FROCITY OF Clewiston FROCITY Pierce Utility Authority FROCITY Ocala Utility Services FROCITY Energy Energy Services FROCITY Energy E	CC 3 CC 3 CC 3 CC 4 CC 3 CC 1											
10.	Group	Janet Smith	Arizona Public Service Co.		Χ		Х		Х	Х				
No	Additional Respo	nses												
11.	Group	Brent Ingebrigtson	PPL NERC Registered Affiliates		Χ		Х		Х	Х				
	Additional Member		al Organization Region		gment ection									
	Charlie Freibert	Louisville Gas and Electric Con Company	SERC	3										
	Brenda Truhe	PPL Electric Utilities Corporati		_										
3.	Annette Bannon	PPL Generation, LLC	RFC	5										



Gro	oup/Individual	Commenter		Organization					Regi	stere	d Balle	ot Bod	y Segr	nent		
							1	2	3	4	5	6	7	8	9	10
4.		PPL Susquehanna, LLC			RFC	5										
5.		PPL Montana, LLC			WECC	5										
6.	Elizabeth Davis	PPL EnergyPlus, LLC			MRO	6										
7.					NPCC	6										
8.					RFC	6										
9.					SERC	6										
10.					SPP	6										
11.					WECC	6										
12.	Group	Michael Lowman	Duke Energy				Х		Х		Х	Х				
Α	dditional Member	Additional Organization Regi	on Segment Sel	ection						•	•	•	•			
1. D	oug Hils	RFC	1													
2. L	ee Schuster	FRC	3													
3. D	ale Goodwine	SER	C 5													
4. G	ireg Cecil	RFC	6													
13.	Group	Kathleen Black	DTE Electric						Х	Х	Х					
А	dditional Member	Additional Organization	on Regio	n Segment Selecti	on											
		NERC Compliance	RFC	3												
	•	NERCTraining & Standards De		4												
3. N		Regulated Marketing	NPCC	5												
4. J	effrey DePriest	NERC Compliance	RFC													
5. B	arbara Holland		RFC													
14.	Group	Robert Rhodes	SPP Standard	s Review Group				Χ								
	Additional Membe	r Additional Organizatio	n Region S	Segment Selection												
	John Allen	City Utilities of Springfield		, 4												
2.	Ron Gunderson	Nebraska Public Power Distric		, 3, 5												
3.	John Hare	Oklahoma Gas & Electric		, 3, 5												
4.	Don Hargrove	Oklahoma Gas & Electric	SPP 1	, 3, 5												
5.	Stephanie Johnson	Westar Energy		, 3, 5, 6												
6.	Bo Jones	Westar Energy	SPP 1	, 3, 5, 6												



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					1	2	3	4	5	6	7	8	9	10
7. Allen Klassen	Westar Energy	SPF	1, 3, 5,	6	•	•	•				•			
8. Tiffany Lake	Westar Energy	SPF	1, 3, 5,	6										
9. Greg McAuley	Oklahoma Gas & Electric	SPF	1, 3, 5											
10. Shannon Mickens	Southwest Power Pool	SPF	2											
11. James Nail	City of Independence, MO	SPF	3											
12. Kevin Nincehelser	Westar Energy	SPF	1, 3, 5,	6										
13. Terri Pyle	Oklahoma Gas & Electric	SPF	1, 3, 5											
14. Randy Root	Grand River Dam Authority	SPF	1											
15. Ashley Stringer	Oklahoma Municipal Power A	Authority SPF	4											
16. Bryan Taggart	Westar Energy	SPF	1, 3, 5,	6										
17. Sing Tay	Oklahoma Gas & Electric	SPF	1, 3, 5											
18. Scott Williams	City Utilities of Springfield	SPF	1, 4											
15. Group	Erika Doot	Bureau c	of Reclama	tion	Х				Х					
No Additional Resp	onses	•												
16. Group	Louis Slade	Dominio	n		Х		Х		Х	Х				
Additional Member	Additional Organization Reg	gion Segme	nt Selection											
1. Connie Lowe	NERC Compliance Policy RF0	C 5, 6												
2. Randi Heise	NERC Compliance Policy SER	RC 5, 6												
3. Mike Garton	NERC Compliance Policy NP	CC 5, 6												
4. Chip Humphrey	Power Generation SEI	RC 5												
5. Michael Crowley	Electric Transmission SEI	RC 1, 3												
6. Jeff Bailey	Nuclear SEI	RC 5												
7. Michael Crowley	SEF	RC 1, 3, 5, 6	6											
8. Randi Heise	MR	O 6												
9. Mike Garton	NPO	CC 5, 6												
10. Connie Lowe	RFC	5, 6												
17. Group	Ben Engelby	ACES Sta	ndards Co	llaborators						Х				
Additional Membe	r Additional Organi	ization	Regio	n Segment Selection										
Shari Heino	Brazos Electric Power Cooper		_	T 1, 5										



Group/Individual	Commenter		Orga	anization			Reg	istere	d Ball	ot Bod	ly Seg	ment		
					1	2	3	4	5	6	7	8	9	10
2. Kevin Lyons	Central Iowa Power Cooperativ	е	MRO		l e e e e e e e e e e e e e e e e e e e	1								-1
3. Scott Brame	North Carolina Electric Membe	ship Corporation	SERC	1, 3, 4, 5										
4. Mark Ringhausen	Old Dominion Electric Coopera	tive	SERC	3, 4										
5. Ginger Mercier	Prairie Power, Inc.		SERC	3										
6. Ellen Watkins	Sunflower Electric Power Corp	oration	SPP	1										
7. Bob Solomon	Hoosier Energy Rural Electric (	Cooperative, Inc.	RFC	1										
8. Bill Hutchison	Southern Illinois Power Cooper	ative	SERC	1										
18. Group	Brandy Spraker	Tennessee V	alley Aı	ıthority	X		Χ		Х	Х				
Additional Member	Additional Organization Reg	on Segment Se	lection											
Marjorie Parsons	_ =	C 6												
2. Daivd Thompson		C 5												
3. DeWayne Scott	SER	C 1												
4. Ian Grant	SER	C 3												
5. Stuart Goza	SER	C 1												
6. Paul Palmer	SER	C 5												
19.		ISO/RTO Cou	ncil Sta	indards Review		Х								
Group	Greg Campoli	Committee												
Additional Member	Additional Organization Reg	ion Segment Se	lection		•		•			•	•	•		
1. Ali Merimadi	CAISO WEG	CC 2												
2. Cheryl Mosley	ERCOT ERC	OT 2												
3. Ben Li	IESO NPC	C 2												
4. Kathleen Goodman	ISO New England NPC	C 2												
5. Terry Bilke	MISO RFC	2												
6. Charles Yeung	SPP SPP	2												
20. Group	Jamison Dye	Bonneville Po	ower A	dministration	Х		Х		Х	Х				
Additional Member	Additional Organization Reg	on Segment Se	lection											
1. Richard Ellison	Transmission Dispatch WEO	CC 1												
2. Tim Loepker	Transmission Dispatch WEO	CC 1												
21. Group	Brenda Hampton	Luminant								Х				
1	,				L	•	•	•					•	



Gro	oup/Individual	Commenter	Organization			Reg	istere	d Ball	ot Boo	ly Seg	ment		
				1	2	3	4	5	6	7	8	9	10
Α	dditional Member	Additional Organization	Region Segment Selection						_		1		<u></u>
1. R	ick Terrill	Luminant Generation Company	y LLC ERCOT 5										
22.	Group	S. Tom Abrams	Santee Cooper	X		Х		Х	Х				
Δ	dditional Member	Additional Organization Reg	ion Segment Selection										
			RC 1, 3, 5, 6										
2. To	om Abrams	Santee Cooper SEF	RC 1, 3, 5, 6										
23.	Individual	Molly Devine	Idaho Power Company	Х									
24.	Individual	Colin Jack	Dixie Power			Х							
25.	Individual	Paul Titus	Northern Wasco County PUD	Х		Х							
26.	Individual	Kenn Backholm	Public Utility District No.1 of Snohomish County	Х		Х	Х	Х	Х			Х	
27.	Individual	Jonathan Appelbaum	The United Illuminating Company	Х									
28.	Individual	Daniel Duff	Liberty Electric Power LLC					Х					
29.	Individual	Matthew P Beilfuss	Wisconsin Electric Power Company			Х	Х	Х					
30.	Individual	Thomas Borowiak	Citizens Electric Corporation	Х									
31.	Individual	Patricia Metro	NRECA	Х		Х	Х						
32.	Individual	Howard Hughes	SLEMCO			Х							
33.	Individual	Michelle R D'Antuono	Ingleside Cogeneration LP					Х					
34.	Individual	Jack Stamper	Clark Public Utilities	Х									
35.	Individual	Josh Dellinger	Glacier Electric Cooperative	Х		Х							
36.	Individual	russ schneider	flathead co-op			Х	Х						
37.	Individual	Oliver Burke	Entergy Transmission	Х									
38.	Individual	Donald E Nelson	Commonwealth of Massachusetts Department of Public Utilities									Х	
39.	Individual	Thomas M. Haire	Rutherford EMC			Х							
40.	Individual	Venona Greaff	Occidental Chemical Corporation							Х			



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Gro	oup/Individual	Commenter	Organization			Regi	istere	d Ball	ot Bod	y Seg	ment		
				1	2	3	4	5	6	7	8	9	10
41.	Individual	William H. Chambliss	Virginia State Corporation Commission, Member OC										
42.	Individual	Shirley Mayadewi	Manitoba Hydro	Х		Х		Х	Х				
43.	Individual	Jason Snodgrass	Georgia Transmission Corporation	Х									
44.	Individual	Andrew Z. Pusztai	American Transmission Company, LLC	Х									
45.	Individual	Michael Falvo	Independent Electricity System Operator		Х								
46.	Individual	David Thorne	Pepco Holdings Inc.	Х		Х							
47.	Individual	Thomas Foltz	American Electric Power	Х		Х		Х	Х				
48.	Individual	Brian Evans-Mongeon	Utility Services, Inc								Х		
49.	Individual	Christopher Wood	Platte River Power Authority	Х		Х		Х				Х	
50.	Individual	Don Schmit	Nebraska Public Power District	Х		Х		Х					
51.	Individual	John Brockhan	CenterPoint Energy Houston Electric LLC	Х									
52.	Individual	David Jendras	Ameren	Х		Х		Х	Х				
53.	Individual	Marie Knox	MISO		Х								
54.	Individual	Catherine Wesley	PJM Interconnection		Х								
55.	Individual	Brett Holland	Kansas City Power & Light	Х		Х		Х	Х				
56.	Individual	Scott McGough	Georgia System Operations Corporation			Х							
57.	Individual	Cheryl Moseley	Electric Reliability Council of Texas, Inc.		Х								
58.	Individual	Michael Landry	DEMCO			Х							
59.	Individual	Scott Berry	Indiana Municipal Power Agency				Х						
60.	Individual	Gregory Campoli	New York Independent System Operator		Х								
61.	Individual	Bill Temple	Northeast Utilities	Х									
62.	Individual	Jen Fiegel	Oncor Electric Delivery Company LLC	Х									
63.	Individual	Maggy Powell	Exelon Corp and its affiliated business units	Х		Х	Х	Х	Х				
64.	Individual	Alice Ireland	Xcel Energy	Х		Х		Х	Х				
65.	Individual	RoLynda Shumpert	South Carolina Electric and Gas	Х		Х		Х	Х				



Gro	oup/Individual	Commenter	Organization			Regi	stere	d Ballo	t Bod	y Segi	nent		
				1	2	3	4	5	6	7	8	9	10
66.	Individual	Anthony Jablonski	ReliabilityFirst										Х
67.	Individual	Richard Vine	California ISO		Х								
68.	Individual	Sergio Banuelos	Tri-State Generation and Transmission Association Inc.	Х		Х		Х					
69.	Individual	Ralph Meyer	The Empire District Electric Company	Х									
70.	Individual	daniel mason	HHWP	Х				Х					



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

Organization	Agree	Supporting Comments of "Entity Name"
Associated Electric Cooperative, Inc JRO00088	Agree	NRECA and SERC OC Review Group
Dominion	Agree	SERC OC Standards Review group
Tennessee Valley Authority	Agree	SERC Operating Committee Review Team
Santee Cooper	Agree	We agree with the comments submitted by SERC.
Dixie Power	Agree	NRECA
Northern Wasco County PUD	Agree	NRECA
Citizens Electric Corporation	Agree	National Rural Electric Cooperative Association(NRECA)
SLEMCO	Agree	NRECA
Glacier Electric Cooperative	Agree	NRECA
flathead co-op	Agree	Flathead supports the comments submitted by NRECA
Entergy Transmission	Agree	SERC OC Review Group

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Organization	Agree	Supporting Comments of "Entity Name"
Commonwealth of Massachusetts Department of Public Utilities	Agree	Northeast Power Coordinating Council (NPCC)
Rutherford EMC	Agree	NRECA
Occidental Chemical Corporation	Agree	Ingleside Cogeneration LP
Ameren	Agree	Ameren agrees with and supports the SERC OC comments on COM-002-4.
Kansas City Power & Light	Agree	SPP - Robert Rhodes
DEMCO	Agree	NRECA
South Carolina Electric and Gas	Agree	SERC OC



1. Do you agree that that the COM-002-4 standard addresses the NERC Board of Trustees November 19, 2013 Resolution? If not, please explain in the comment area.

Summary Consideration: The OPCP SDT would like to thank all parties who took the time to submit comments. The NERC Board of Trustees Resolution directed the OPCP SDT to continue development of a combined COM-002- and COM-003 standard that, among other things, requires the use of the three-part communication for both Emergency Communications and non-emergency communications that change or preserve the state, status, output, or input of the Bulk Electric System; requires training and periodic review of communications subject to the communications protocols; and requires entities to assess the effectiveness of their communications protocols as well as their operators adherence to the protocols. Additionally, the Resolution directed that entities must use three-part communication when issuing and/or receiving Operating Instructions during Emergency Communications without exception. The following is provided as a summary response to the comments on Question 1. Any necessary additional responses are provided to individual commenters below.

Several commenters, including SERC OC Review Group, Georgia Transmission Company, and NRECA, commented that Distribution Providers should not be included as an applicable entity to COM-002-4 or that, if included, the applicability be limited to Distribution Providers who "shed 300 MW or more of load in a single manually initiated operation or have switching obligations related to Any Cranking Path and group of Elements meeting the initial switching requirements from a Blackstart Resource . . ."

The OPCP SDT chose to include Distribution Providers in the Applicability section because they can be and are on the receiving end of some Operating Instructions. The OPCP SDT could not determine a technical basis to support a threshold to exclude certain Distribution Providers. The OPCP SDT continues to believe that the language in COM-002-4, R6 that limits the application of R6 to only a Distribution Provider "that receives an oral two-party, person-to-person Operating Instruction during an Emergency" properly excludes Distribution Providers that do not receive Operating Instructions from the requirement. The inclusion of Distribution Providers is also responsive to the FERC directive to include Distribution Providers as an applicable entity under the standard.

Other commenters noted that the requirements do not differentiate clearly between the actions operators must take during non-Emergency and Emergency situations. In COM-002-4, the same protocols are to be used for Operating Instructions in all operating conditions, i.e., non-emergency, alert, and Emergency communications. The OPCP SDT believes that one set of communication protocols should be used at all times by operators in order to improve consistency and minimize confusion. The standard uses the phrase "Operating Instruction during an Emergency" in certain Requirements (R5, R6, and R7) to provide a demarcation for what is subject to a zero-tolerance compliance/enforcement approach. Where "Operating Instruction during an Emergency" is not used, an entity will be assessed based on the language of the other requirements, which focus on whether an entity met the initial training requirement (either R2 or R3) and/or whether an entity performed the assessment and took corrective actions according to

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Requirement R4. Separately listing out Requirements R5, R6, and R7 and using "Operating Instruction during an Emergency" in them does not require a different set of protocols to be used during Emergencies or mandate the identification of a communication as an "Operating Instruction during an Emergency." The same protocols are required to be used in connection with the issuance of Operating Instructions for all operating conditions.

Several commenters also stated they believe the issuer of an Operating Instruction during an Emergency should be required to indicate to the recipient that the instruction being issued is for the purpose of preventing or alleviating an Emergency. The OPCP SDT has considered these comments but asserts that such a requirement could distract operators, causing them to focus on determining whether or not a situation meets the definition of an Emergency, rather than resolving the issue at hand. Because the protocols do not differ based on the operating condition, the OPCP SDT determined that it was not necessary to require such indication in the protocols mandated by the standard. The OPCP SDT notes that the standard does not preclude entities from adding its own protocols to do so.

Some parties expressed a concern that the definition of "Emergency" was unclear, vague, and subject to interpretation. Commenters also expressed concern about the auditor's ability to make a distinct determination as to what Operating Instructions were in response to an Emergency and at what point the actual Emergency began, as Emergency communications triggers the zero-tolerance compliance approach. The NERC Glossary of Terms defines Emergency as "Any abnormal system condition that requires automatic or immediate manual action to prevent or limit the failure of transmission facilities or generation supply that could adversely affect the reliability of the Bulk Electric System." It is expected that these are abnormal and rare circumstances, and that there will be no confusion about the state. The term is an established NERC Glossary term that has been successfully used in other standards. Additionally, redefining the NERC Glossary term "Emergency" has implications in other reliability standards beyond COM-002-4.

It was also suggested by several individuals and entities that the inclusion of a training requirement was not necessary and/or would be better suited for inclusion in PER-005. The OPCP SDT consulted with the PER-005 Standard Drafting Team and was advised that while training on communications protocols would fall into an entity's systematic approach to training, the requirements do not explicitly mandate training on communications protocols. The OPCP SDT asserts it is essential for all operators to have a common level of understanding and be trained in three-part communication. Because PER-005 would not meet the NERC Board of Trustees November 7, 2013 Resolution to mandate training, the OPCP SDT included a requirement to conduct initial training in order to ensure that a baseline of training is complete before an individual is placed in a position to use the communications protocols. The OPCP SDT further asserts requiring initial training is not overly burdensome to an entity and any subsequent training can be covered in PER-005 or through the operator feedback loop as determined by the entity.

Other entities have commented that the requirements in COM-002-4 subject entities to double jeopardy as a result of the currently effective TOP and IRO requirements. The OPCP SDT disagrees with this assertion, as COM-002-4 only deals with communications and communication protocols, whereas the TOP and IRO family of standards govern the <u>actions</u> which an entity must perform.

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Some parties asked how an entity would specify system wide nomenclature in their protocols, or stated they believed this was not necessary since Project 2007-03 chose to eliminate TOP-002-2a, Requirement R18 when it developed TOP-002-3. This requirement stated "Neighboring Balancing Authorities, Transmission Operators, Generator Operators, Transmission Service Providers and Load Serving Entities shall use uniform line identifiers when referring to transmission facilities of an interconnected network." The standard drafting team addressed this issue in the FAQ document posted on the project page. The following response was provided: "COM-002-4, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations) for Operating Instructions. This supports both parties being familiar with each other's interface Elements and Facilities, minimizing hesitation and confusion when referring to equipment for the Operating Instruction." The nomenclature is not specified as "system wide." Requirement R1 Part 1.6 only requires entities to specify what, if any, nomenclature must be used for Transmission interface Elements or Transmission interface Facilities (e.g., tie lines and tie substations). The OPCP SDT did not want to be overly prescriptive in instructing an entity on how it should identify its nomenclature.

Lastly, some commenters noted that they felt the "assess adherence and assess effectiveness" contained within Requirement R4, the associated Measure, and VRFs/VSLs was similar to the "identify assess and correct" (IAC) language contained in certain CIP Version 5 requirements, which FERC directed NERC to remove or clarify. However, the OPCP SDT asserts that there is a difference in the language, and that the ambiguity FERC identified in the IAC language is not an issue in the COM-002-4 standard. The OPCP SDT added clarifying language in the requirements to specify the actions that an entity is expected to take.

Organization	Yes or No	Question 1 Comment
SERC OC Review Group	No	The SERC OC Review Group appreciates the efforts that the OPCP SDT has made on this draft standard and the flexibility demonstrated to address the constantly evolving feedback received. We do not believe the proposed requirements and measures clearly delineate the differences in the actions required to be taken by the issuer and recipient depending upon whether or not the Operating Instruction is being given to alleviate or avoid an Emergency.
		Applicability Section:4.1.2 Distribution Provider: We understand that it would be difficult to remove the Distribution Provider from the applicability of COM-002-4 per FERC's directives. Therefore, we are respectfully recommending an alternative that parallels the recently FERC approved CIP-003-5 that we believe accurately captures those DPs that receive Operating Instructions associated with the reliability of the BES. The following alternative to clarify those Distribution Providers that have an impact on the BES is recommended:4.1.2 Distribution Provider that: 4.1.2.1 Has capability to shed 300 MW or more of load in a single

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Organization	es or No	Question 1 Comment
		manually initiated operation.4.1.2.2 Has switching obligations related to Any Cranking Path and group of Elements meeting the initial switching requirements from a Blackstart Resource up to and including the first interconnection point of the starting station service of the next generation unit(s) to be started.
		General Requirement Comment: The OPCP SDT is respectfully requested to review the Requirements to ensure that it is clear that "during an Emergency" is only applicable to the entities involved.
		Requirement 1: The proposed standard still contains requirements that mandate the use of, and training to include, 3 part communications during issuance of all Operating Instructions, including those issued during non-Emergency situations. While we agree that the OPCP SDT has stated in its Rationale and Technical Justification document that the proposed measures don't specifically require that auditors verify compliance of this for the requirements (and associated measures), a strict read leads to a different conclusion. We are concerned that, absent a requirement that the issuer make a definitive statement as to whether an Operating Instruction is being issued to alleviate or avoid an Emergency, neither the recipient (during) nor an auditor (after) would be able to make such determination. We respectfully recommend modifying requirement 1 so that it applies to all Operating Instructions but requires that those being issued to alleviate or avoid an Emergency be specifically identified as such and that the issuer explicitly request recipient confirm their understanding through use of 3 part communication. To accomplish this we propose a new R1.1. The current R1.1 through R1.6 would be renumbered R1.2 through R1.7Current R1 language: R1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall develop documented communications protocols for its operating personnel that issue and receive an oral or written Operating Instruction to use the English language, unless agreed to otherwise. An alternate language may be used for internal operations. Proposed R1 language: R1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall develop documented communications protocols for its operating personnel that issue and receive Operating Instructions. The protocols shall, at a minimum: [Violation Risk Factor: Low][Time Operating Instructions. The protocols shall, at a minimum: [Violation Risk Factor: Low][Time Operating Instructions. The protocols shall, at a minimum: [Viola



Organization	Yes or No	Question 1 Comment
		Horizon: Long-term Planning]Proposed R1.1: ADD: Require that its operating personnel identify, at the time of issuance, when the Operating Instruction is being issued to alleviate or avoid an Emergency R1.2: Based on the OPCP SDT comments and zero tolerance for Emergency communications we propose a new bullet be added to R1.2. Current R1.2 language: Require its operating personnel that issue an oral two-party, person-to-person Operating Instruction to take one of the following actions: o Confirm the receiver's response if the repeated information is correct. o Reissue the Operating Instruction if the repeated information is incorrect or if requested by the receiver. o Take an alternative action if a response is not received or if the Operating Instruction was not understood by the receiver. Proposed R1.2: Require its operating personnel that issue an oral two-party, person-to-person Operating Instruction to take one of the following actions: o Confirm the receiver's response if the repeated information is correct. o Reissue the Operating Instruction if the repeated information is incorrect or if requested by the receiver. o Take an alternative action if a response is not received or if the Operating Instruction was not understood by the receiver. o ADD: Request recipient use 3 part communication when the Operating Instruction is being issued to alleviate or avoid an EmergencyR1.3: We respectfully recommend a word change (correct to understood) in 1.3, bullet 1. Current 1.3 sub-bullet 1 follows: Repeat, not necessarily verbatim, the Operating Instruction and receive confirmation from the issuer that the response was correct. Proposed 1.3, sub-bullet 1: Repeat, not necessarily verbatim, the Operating Instruction from the issuer that the response was understood.
		Requirement R2: This group feels that R2 should be eliminated as redundant with the systematic approach to training requirements of PER-005 (Operations Personnel Training) which are applicable to all BAs, RCs & TOPs. Communications protocols must be included in each company's specific reliability-related task list. Inherent in systematic approach is initial training on all reliability-related tasks, since each task must be analyzed as to its Difficulty, Importance & Frequency (DIF analysis). As a result of the DIF analysis, systematic approach would require that communications protocols have both initial and continuing training.  Requirement R3: We agree with the OPCP SDT concern that Operating Personnel should not be placed in a position to receive an oral two-party, person-to-person Operating Instruction



Organization	Yes or No	Question 1 Comment
		prior to being trained. This Group understands that OPCP SDT included an initial training requirement in the standard in response to the NERC Board of Trustees' resolution, which directs that a training requirement be included in the COM-002-4 standard. We would like to recommend that the term "initial" be removed so not to give the impression that training is a one-time effort. Current R3 language: Each Distribution Provider and Generator Operator shall conduct initial training for each of its operating personnel who can receive an oral two-party, person-to-person Operating Instruction prior to that individual operator receiving an oral two-party, person-to-person Operating Instruction to either: [Violation Risk Factor: Low][Time Horizon: Long-term Planning] Proposed R3 language: Each Distribution Provider and Generator Operator shall conduct training for each of its operating personnel who can receive an oral two-party, person-to-person Operating Instruction prior to that individual operator receiving an oral two-party, person-to-person Operating Instruction to either: [Violation Risk Factor: Low][Time Horizon: Long-term Planning]
		Requirements R5, R6, and R7: This Group feels that the relationship between R1, R5, R6, and R7 requires further clarification to remove possible opportunities for different interpretations which could result in uncertainty as to whether the Operating Instruction is being issued to alleviate or avoid an Emergency. The concern centers on the absence of a requirement that the issuer make a definitive statement as to whether an Operating Instruction is being issued to alleviate or avoid an Emergency, neither the recipient (during) nor an auditor (after) would be able to make such determination. This is the reason for the R1 modifications. If the recommended R1 modifications are accepted then R5, R6, and R7 should be considered for deletion (incorporating specific items deemed necessary by the OPCP SDT as bullets or sub-requirements of R1).
		Measures: Measure 1: Base on the Group's recommendations above we propose for consideration the following modification to Measure 1: Current M1 language: Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide its documented communications protocols developed for Requirement R1. Proposed M1 language: Revised M1: Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide its documented communications protocols developed for Requirement R1. For each Operating Instruction issued to alleviate or avoid an Emergency; entity shall provide evidence



Organization	Yes or No	Question 1 Comment
		that it identified such at time Operating instruction was issued (R1.1) and requested recipient use of 3 part communication (R1.2).
		Response: Requirement R1 states "Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall develop documented communications protocols for its operating personnel that issue and receive Operating Instructions. The protocols shall, at a minimum:" The Measure and, therefore, evidence, is proof of the developed protocols.
		Measure 2,5,6, and 7: If our recommendations are accepted then Measures 2, 5, 6, and 7 should be deleted incorporating specific items deemed necessary by the OPCP SDT as bullets or sub-requirements of R1 Measure 3: To align M3 with our R3 recommendation we propose deleting the word "initial". Current M3 language: Each Distribution Provider and Generator Operator shall provide its initial training records for its operating personnel such as attendance logs, agendas, learning objectives, or course materials in fulfillment of Requirement R3.Proposed M3 language: Each Distribution Provider and Generator Operator shall provide its training records for its operating personnel such as attendance logs, agendas, learning objectives, or course materials in fulfillment of Requirement R3.
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
Northeast Power Coordinating Council	No	The proposed Requirements and Measures do not clearly delineate the differences in the actions required to be taken by the issuer and recipient depending upon whether or not the Operating Instruction is being given to alleviate or avoid an Emergency.
Duke Energy	No	(1)Duke Energy believes that Operating Instruction during an Emergency is unclear, vague, and subject to interpretation. By using the NERC defined term of Emergency, certain tasks that Duke Energy believes is a non-emergency action would now be considered an Emergency and subject to zero tolerance. Duke submits, for consideration by the OPCP SDT,



Organization	Yes or No	Question 1 Comment
		a revised definition of Emergency in an attempt to remove this ambiguity. Emergency - Any abnormal system condition that requires automatic or immediate manual action to prevent the failure of transmission facilities or generation supply that would adversely affect the reliability of the Bulk Electric System.
Dominion	No	We do not believe the proposed requirements and measures clearly delineate the differences in the actions required to be taken by the issuer and recipient depending upon whether or not the Operating Instruction is being given to alleviate or avoid an Emergency.
ACES Standards Collaborators	No	(1) We disagree that the current draft addresses the NERC Board resolution because the Board charged the drafting team with developing an "essential set of communications protocols" for reliable operation of the BES. The proposed standard conflicts with other existing reliability standards, which would subject entities to double jeopardy. Therefore, the standard includes more than an "essential set" of requirements as stated in the NERC Board Resolution.
		(2) For example, the "nomenclature" protocol in Requirement R1 is duplicative with TOP-002 R18. Since FERC issued a NOPR proposing to remand the TOP standards, the requirement of using "uniform line identifiers" will remain as an enforceable standard. Having a nomenclature requirement in COM-002-4 will subject entities to double jeopardy and is not an "essential set of communication protocols."
		(3) Another example of a redundant requirement is training. Communications that impact the BES will be covered in a reliability related task as part of the systematic approach to training. This will also subject entities to double jeopardy with PER-005 R1 and is not an "essential set of communication protocols."
		(4) We appreciate the efforts of the drafting team in working to address the FERC directives and NERC November 2013 BOT Resolution, but we do not believe that COM-002-4 accurately



Organization	Yes or No	Question 1 Comment
		reflects the proper applicability for entities that have an impact on the operations of the Bulk Electric System in normal and emergency conditions. We understand that the inclusion of Distribution Providers to this standard stems from various FERC directives, but because of the relationship of Distribution Providers with Transmission Operators as identified in NERC's functional model in being only a receiver of instructions to implement voltage reduction or to shed load to prevent the failure of the BES, or related to restoration activities as coordinated with the Transmission Operator; the TOP is ultimately responsible for the proper execution of the instructions. Thus, we continue to recommend that Distribution Providers be removed from the applicability of COM-002-4.
		(5) Knowing that it will be difficult to remove the Distribution Provider from the applicability of COM-002-4 per FERC's directives, we recommend an alternative that parallels the recently FERC approved CIP-003-5 applicability section 4.1.2, which we believe accurately captures those DPs that receive Operating Instructions associated with the reliability of the BES. The following alternative can be used as technical justification to clarify those Distribution Providers that have an impact on the BES is recommended:"4.1.2 Distribution Provider that: 4.1.2.1 Has capability to shed 300 MW or more of load in a single manually initiated operation. 4.1.2.2 Has switching obligations related to any Cranking Path and group of Elements meeting the initial switching requirements from a Blackstart Resource up to and including the first interconnection point of the starting station service of the next generation unit(s) to be started."
NRECA	No	NRECA appreciates the efforts of the drafting team in working to address the FERC directives
		and NERC BOT Resolution November 2013, but does not believe that COM-002-4 accurately reflects the proper applicability for entities that have an impact on the operations of the Bulk Electric System in normal and emergency conditions. NRECA understands that the inclusion of Distribution Providers to this standard stems from various FERC directives, but because of the relationship of Distribution Providers with Transmission Operators as identified in NERC's functional model in being only a receiver of instructions to implement voltage reduction or to



Organization	Yes or No	Question 1 Comment
		shed load to prevent the failure of the BES, or related to restoration activities as coordinated with the Transmission Operator; the TOP is ultimately responsible for the proper execution of the instructions, continues to recommend that Distribution Providers be removed from the applicability of COM-002-4. Knowing that it will be difficult to remove the Distribution Provider from the applicability of COM-002-4 per FERC's directives, NRECA is recommending an alternative that parallels the recently FERC approved CIP-003-5 that we believe accurately captures those DPs that receive Operating Instructions associated with the reliability of the BES. The following alternative to clarify those Distribution Providers that have an impact on the BES is recommended: 4.1.2 Distribution Provider that: 4.1.2.1 Has capability to shed 300 MW or more of load in a single manually initiated operation. 4.1.2.2 Has switching obligations related to Any Cranking Path and group of Elements meeting the initial switching requirements from a Blackstart Resource up to and including the first interconnection point of the starting station service of the next generation unit(s) to be started. NRECA proposes to recommend an "affirmative" ballot to its members if the applicability is modified in the next posting as provided.
Oncor Electric Delivery Company LLC	No	The Operating Instruction during an Emergency is unclear, vague, and subject to interpretation. By using the NERC defined term of Emergency, certain tasks that are a non-emergency action would now be considered an Emergency. Oncor supports GTC's recommendation of the removal of the terms "or limit" within this definition. One could argue that every single Operating Instruction is utilized to limit failures of transmission facilities. Emergency should be more appropriately defined without this ambiguity. We submit, for the OPCP SDT's consideration, a revised definition of Emergency in an attempt to remove this ambiguity. Emergency - Any abnormal system condition that requires automatic or immediate manual action to prevent the failure of transmission facilities or generation supply that would adversely affect the reliability of the Bulk Electric System. Oncor does not believe that COM-002-4 accurately reflects the proper applicability for entities that have an impact on the operations of the Bulk Electric System in normal and emergency conditions. Oncor understands that the inclusion of Distribution Providers to this standard stems from



Organization	Yes or No	Question 1 Comment
		various FERC directives, but because of the relationship of Distribution Providers with Transmission Operators as identified in NERC's functional model in being only a receiver of instructions to implement voltage reduction or to shed load to prevent the failure of the BES, or related to restoration activities as coordinated with the Transmission Operator; the TOP is ultimately responsible for the proper execution of the instructions, continues to recommend that Distribution Providers be removed from the applicability of COM-002-4. Knowing that it will be difficult to remove the Distribution Provider from the applicability of COM-002-4 per FERC's directives, Oncor supports the alternatives recommended by GTC as an opportunity to address this. In addition, the COM-002-4 does not align with the evaluation and findings of the NERC Reliability Issues Steering Committee (RISC) and Operating Committee (OC) which supports the importance of clear communications but found no evidence that non-emergency communications represent a reliability gap.
Exelon Corp and its affiliated business units	No	Revision 8 addresses the Board Resolution, but it goes beyond the resolution by including GOP's and DP's as applicable entities thereby creating redundant and unnecessary compliance obligations for many of those entities. See comments below in response #4.Furthermore, while the new approach in this draft is an improvement, it does not achieve the desired goal to move away from a zero tolerance focus on the use of three part communication within this standard. If time is allowed for further work on this standard, we offer potential adjustments below in response #4.A couple points of potential confusion:-Question 1 and the link to the Board Resolution on the Project page cites a November 19, 2013 Resolution; however, the link takes readers to a November 7, 2013 Resolution. We assume the November 7, 2013 Resolution is the correct reference The first bullet of the November 7, 2013 Board Resolution refers to the Operating Committee Guidelines for good communication practice. This OC document does not appear to be linked to the Project page. It is unlikely that many stakeholders would have found and/or reviewed the document relative to the proposed COM-002-4 draft.  Response: The November 7 reference is correct and has been updated.



Organization	Yes or No	Question 1 Comment
		The OC document was posted in June of 2012 on the Operating Committee Related Files page and may be found at the following location: <a href="http://www.nerc.com/comm/OC/Related%20Files%20DL/OC%20Approved_COM-002-2%20Guideline_6-24-2012_For%20Posting_w%20line%20numbers_Clean_Version%202.pdf">http://www.nerc.com/comm/OC/Related%20Files%20DL/OC%20Approved_COM-002-2%20Guideline_6-24-2012_For%20Posting_w%20line%20numbers_Clean_Version%202.pdf</a> .
	<u> </u>	
The United Illuminating Company	No	
Ingleside Cogeneration LP	Yes	Ingleside Cogeneration LP ("ICLP") believes that the requirements that govern directives issued during the course of an Emergency remain consistent with those in-place today. In addition, the latest draft of COM-002-4 allows oversight of all other Operating Instructions - although to a lesser degree. This is a good combination of compliance strategies that retains focus on the important communications while adding attention on daily discussions which may have impact on the BES if improperly transacted.
CenterPoint Energy Houston Electric LLC	Yes	CenterPoint Energy agrees that the COM-002-4 standard addresses the NERC Board of Trustees 2013 Resolution.
North American Generator Forum -	Yes	



Organization	Yes or No	Question 1 Comment
Standards Review Team (NAGF-SRT)		
Salt River Project	Yes	
NERC Standards Review Forum	Yes	
Southern Company; Southern Company Services,Inc; Alabama Power Company; Georgia power Company; Gulf Power Company; Mississippi Power Company; Southern Company Generation and Energy Marketing	Yes	
Florida Municipal Power Agency	Yes	
Arizona Public Service Co.	Yes	
DTE Electric	Yes	
Bonneville Power Administration	Yes	



Organization	Yes or No	Question 1 Comment
Luminant	Yes	
Idaho Power Company	Yes	
Public Utility District No.1 of Snohomish County	Yes	
Liberty Electric Power	Yes	
Wisconsin Electric Power Company	Yes	
Clark Public Utilities	Yes	
Virginia State Corporation Commission, Member OC	Yes	
Manitoba Hydro	Yes	
Independent Electricity System Operator	Yes	
Platte River Power Authority	Yes	
MISO	Yes	



Organization	Yes or No	Question 1 Comment
PJM Interconnection	Yes	
Georgia System Operations Corporation	Yes	
Northeast Utilities	Yes	
Tri-State Generation and Transmission Association Inc.	Yes	
The Empire District Electric Company	Yes	

2. Do you agree that COM-002-4 addresses the August 2003 Blackout Report Recommendation number 26, and FERC Order No. 693? If not, please explain in the comment area.

Summary Consideration: The OPCP SDT thanks all those who took the opportunity to comment on Question 2. The August 2003 Blackout Report Recommendation number 26 called entities to tighten communications protocols especially during Emergencies and alerts. The following is provided as a summary response to the comments on Question 2. Any necessary additional responses are provided to individual commenters below.

Some commenters expressed concern that neither the August 2003 Blackout Report Recommendation number 26 nor FERC Order No. 693 recommended the use of three-part communication. FERC Order No. 693 Paragraph 531 states "We adopt our proposal to require the ERO to establish tightened communication protocols, especially for communications during alerts and emergencies, either as part of COM-002-2 or as a new Reliability Standard. We note that the ERO's response to the Staff Preliminary Assessment supports the need to develop additional Reliability Standards addressing consistent communications protocols among personnel responsible for the reliability of the Bulk-Power System." FERC also states that the goal is to establish communication uniformity as much as practical on a continent-wide basis to eliminate possible ambiguities in communications during normal, alert, and emergency conditions. The existing COM-002-2 includes three-part communication and the OPCP SDT determined that three-part communication is a necessary protocol.

Other commenters stated that Recommendation 26 from the 2003 Blackout report is about situational awareness and not about what System Operators should say in their conversations. The OPCP SDT asserts that situational awareness is improved by operationally sound communication protocols, which decrease the possibility of miscommunications.

Other commenters stated that Recommendation 26 of the 2003 Blackout Report continues to be misinterpreted. The recommendation is focused on how the ERO should communicate with governmental agencies. It states, "Standing hotline networks, or a functional equivalent, should be established for use in alerts and emergencies (as opposed to one-on-one phone calls) to ensure that all key parties, [including state and local officials] are able to give and receive timely and accurate information." FERC Order No. 693 Paragraph 534 states "In response to MISO's contention that Blackout Report Recommendation No. 26 has been fully implemented, we note that Recommendation No. 26 addressed two matters. We believe MISO is referring to the second part of the recommendation requiring NERC to '[u]pgrade communication system hardware where appropriate" instead of tightening communications protocols. While we commend the ERO for taking appropriate action in upgrading its NERCNet, we remind the industry to continue their efforts in addressing the first part of Blackout Recommendation No. 26." In response, the OPCP SDT has not focused on hardware issues, instead focusing on communication protocols.

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One commenter stated that allowing the issuer of an Operating Instruction to seek confirmation from only one recipient in Requirement R7 ignores the recommendation from the Blackout Report to use new technology. The OPCP SDT asserts that it is important that the issuer of a written or oral single-party to multiple-party burst Operating Instruction make sure that the communication channel was complete. This can be accomplished by confirming with at least one party that the communication was received. This is not limited to any particular technology that could be employed for the necessary confirmation.

Certain commenters indicated that COM-002-4 goes outside the scope of Recommendation 26 of the Blackout Report because it deals with both non-Emergency and Emergency communications. However, the OPCP SDT contends that operators are often not aware they are in an Emergency situation until after the event has ended. Therefore, in order to mitigate a potential reliability gap, it is essential that COM-002-4 require a single set of communication protocols that are always used by operators.

Organization	Yes or No	Question 2 Comment
Northeast Power Coordinating Council	No	We do not agree that the blackout recommendation calls for the use of 3 part communication for every Operating Instruction and note that neither the NERC Board nor the OPCP SDT has provided any evidence that indicates a direct correlation between errors due to communication problems and events that adversely impact the BES. The justification for reliability standard Requirements that require 3 part communication for every Operating Instruction, and having to enforce compliance with the same, is not supported.
NERC Standards Review Forum	No	As it has been stated in previous comments, Recommendation 26 from the 2003 Blackout report is about situational awareness and who and what entities need to be contacted during emergencies. It is not about what System Operators should say in their conversations.

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Organization	Yes or No	Question 2 Comment
Duke Energy	No	(1)Based on our comments to Question 1, Duke Energy does not believe that the OPCP SDT has addressed Recommendation 26 of the August 2003 Blackout report. The intent of the 2003 Blackout recommendation was to provide tighter communication during normal and emergency situations. Due to the ambiguity that exists between Operating Instruction and Operating Instruction during an Emergency, we believe that this recommendation was not addressed.
SPP Standards Review Group	No	Our understanding of Recommendation 26 is that it deals strictly with communications during emergencies which COM-002-3 had already addressed. The addition of non-emergency communications, which are not mentioned in Recommendation 26 at all, has expanded the scope of the standard beyond that called for by the recommendation. The addition of non-emergency communications has added additional compliance burden for the responsible entities without clearly improving the reliability of the BES.
Dominion	No	We do not agree that the blackout recommendation calls for the use of 3 part communication for every Operating Instruction and note that neither the NERC Board nor the OPCP SDT has provided any evidence that indicates a direct correlation between errors due to communication problems and events that adversely impacted the BES. Therefore we find it difficult to support reliability standard requirements that require 3 part communication for every Operating Instruction and enforce compliance with same.
ACES Standards Collaborators	No	(1) We believe recommendation number 26 of the 2003 Blackout Report continues to be misinterpreted. The recommendation is focused on how the ERO should



Organization	Yes or No	Question 2 Comment
		communicate with governmental agencies. It states, "Standing hotline networks, or a functional equivalent, should be established for use in alerts and emergencies (as opposed to one-on-one phone calls) to ensure that all key parties, [including state and local officials] are able to give and receive timely and accurate information." The recommendation does not state anywhere to utilize three-part communication. COM-002-4 does not address the development of hotline networks or "upgrading communication system hardware where appropriate" for contacting governmental agencies, including state and local officials.
Luminant	No	Recommendation 26 of the August 2003 Blackout Report was to "Tighten communications protocols, especially for communications during alerts and emergencies. Upgrade communication system hardware where appropriate." Technology is now available and already in use in some places that allow recipients of an All-Call/Burst Message type Operating Instruction to press a button on the phone keypad to acknowledge understanding of the Operating Instruction. This allows the issuer a quick and easy way to confirm the understanding of all recipients of the Operating Instruction. Allowing the issuer of an Operating Instruction to seek confirmation from only one recipient in R7 ignores the recommendation from the Black Out Report to use new technology.
Georgia Transmission Corporation	No	Comments: GTC recognizes FERC Order 693 directs the revision of COM-002 to include the DP and specifically states how essential it is that the TOP, BA and RC have communications with DPs. Additionally, GTC observes Order 693 also identifies the need for tightened communications protocols, especially for communications during alerts and emergencies and that such protocols shall be established with uniformity as much as practical on a continent wide basis to eliminate possible ambiguities in communications during emergency conditions. If the Standard requires the use of 3



Organization	Yes or No	Question 2 Comment
		part communications by the issuers of Operating Instructions, then it would seem sensible that receivers of Operating Instructions be trained for awareness and proper participation of such protocols. GTC sees parallels of this approach in other Standards such as restoration training of DPs identified in the TOPs restoration plan as required in EOP-005-2. GTC believes the current proposal of COM-002-4 still contains ambiguities that should be addressed before GTC can provide an affirmative ballot. GTC is offering 3 alternatives such that if any of them is adopted by the OPCP SDT, GTC would modify our position to cast an affirmative vote in the next recirculation. Alternative 1 (Modify the DP applicability): Applicability Section:4.1.2 Distribution Provider: GTC is recommending an alternative that parallels the recently FERC approved CIP-003-5 that we believe accurately captures those DPs that receive Operating Instructions associated with the reliability of the BES when in an Emergency. The following alternative to clarify those Distribution Providers that have an impact on the BES is recommended:4.1.2 Distribution Provider that:4.1.2.1 Has capability to shed 300 MW or more of load in a single manually initiated operation.4.1.2.2 Has switching obligations related to Any Cranking Path and group of Elements meeting the initial switching requirements from a Blackstart Resource up to and including the first interconnection point of the starting station service of the next generation unit(s) to be started. Alternative 2 (Modify the DP applicability per above, modify R3; Eliminate R6): Alternative 2 is an extension of alternative 1 for additional clarities. Requirement 3: Revise R3 to insert the words [during an Emergency] within the sentence "who can receive an oral two-party, person-to-person Operating Instruction [during an Emergency] prior to that individual operator". Additionally, replace the word "receive" with the word "request" in the first bullet of R3. The word "receive" is ambiguous and the word "req



Organization	Yes or No	Question 2 Comment
		performing field switching activities should be required to document evidence of following the oral communication practices. Issuers of Operating Instructions are already recording the Operating Instruction communications and have the capability to do so. Issuers are also required to ensure the receiver responds accordingly per R5. Issuers are required to confirm the receiver's response is correct or else reissue if incorrect; issuers can also take an alternative action. Having the receiver document the implementation of these practices for compliance is redundant and duplicative to the issuer's requirements. This is an unnecessary, administrative requirement that introduces a double jeopardy situation that does not enhance the reliability of the BES. The OPCP SDT should recognize that all reliability bases are covered with the training requirements of the issuers in R1, the training requirement of the receivers in R3, and the performance of these are monitored via the issuers recording capabilities in R5 and R7. With this approach, issuers can be satisfied that receivers are prepared to receive instructions in accordance with their training, and the options the issuers have per R5 in a live scenario. The receivers could not expose or cause a non-compliance situation to the issuers. However, the issuers could expose the receivers to a non-compliance situation if a recording is lost or damaged and the receiver was on hiscell phone in the field taking orders and performing switching, hence the double jeopardy and GTC's plea to remove this requirement 6.Alternative 3 (Modify the DP applicability above, Modify R3 above, Modify R6, create separate DP requirement):Requirement 6: If the OPCP SDT decides that R6 must remain, then GTC requires the following changes to modify our negative vote to affirmative. GTC appreciates the drafting team making concessions to eliminate the need for DPs and GOPs being required to have documented communication protocols. Additionally, GTC appreciates the drafting team's willingness to



Organization	Yes or No	Question 2 Comment
		shed load or reduce voltage to prevent the failure of transmission facilities or generation supply that could adversely affect the reliability of the BES. GTC would submit that the TOP would further limit the DPs role to "manual" load shed type situations when the "automatic" load shed schemes misoperate or malfunction as designed. This is highlighted in the NERC functional model which identifies this real time function of the DP "Implements voltage reduction and sheds load as directed by the Transmission Operator or Balancing Authority". During an Emergency, which NERC defines as any abnormal condition that requires automatic or immediate manual action to prevent or limit the failure of transmission facilities or generation supply that could adversely affect the reliability of the BES, the aforementioned function is what the DP will be called upon to implement. The ambiguity that arises is captured within the various types of utility registrations with NERC, and GTC believes the OPCP SDT can accommodate two distinct types of DPs which GTC believes to be critical to pass this Standard. GTC observed there are 298 entities in the NERC registry that are true DP function only. Most of these are DP/LSE and would not own BES assets, but they would be directly connected to the BES, hence registration. These entities own load serving substations and implementing voltage reduction or shedding load in an Emergency would not be ambiguous. However, GTC observed there are 242 entities in the NERC registry that are registered DPs, and also registered TOs that own BES assets. To these integrated entities, the scope of communications during an Emergency would be more ambiguous, as these entities may perform actions at transmission stations on a routine basis that the other DP only type entities would not have to consider. With the addition of R6 as written, these entities have an amplified burden of compliance risk associated with their TO registration even though R6 applies to them as a DP. This burden is the separation of th
		commensurate to the DPs function as documented in the NERC functional model.



Organization	Yes or No	Question 2 Comment
		Proposed R6 language: Remove Distribution Provider from R6. Create a separate standalone requirement for the DP.R#. Each Distribution Provider that receives an oral two-party, person-to-person Operating Instruction to implement voltage reduction or shed load during an Emergency, excluding written or oral single-party to multiple-party burst Operating Instructions, shall either:* Repeat, not necessarily verbatim, the Operating Instruction and request confirmation from the issuer that the response was correct, or* Request that the issuer reissue the Operating Instruction.
		Response: Please see the Summary Responses to Question 1 and Question 2.
Nebraska Public Power District	No	Recommendation 26 calls for work to be done to improve the effectiveness of communications in emergency situations. The purpose of the standard is to improve communications. However, the focus of the standard is primarily 3-part communications. There is no supporting documentation or data that 3-part communications improves the effectiveness of communications. Focusing on 3-part communications provides an easy target from a compliance perspective but all it teaches us is to mechanically repeat back what we have been instructed to do. We're focusing on the 'how' and 'what' rather than the 'why'. Keeping the 'why' in mind improves communications and the reliability of the BES. Keeping the 'why' in mind also leads to improved situational awareness. Improving effective communications is difficult to quantify in a standard and even more difficult to measure. We may be better off focusing on the principles contained in the OC's Reliability Guideline System Operator Verbal Communications - Current Industry Practices.
Georgia System Operations Corporation	No	GSOC recommends modifying R1 so that it applies to all Operating Instructions but requires that those being issued to alleviate or avoid an Emergency be specifically identified as such and that the issuer explicitly request recipient confirm



Organization	Yes or No	Question 2 Comment
		understanding through use of 3 part communication. This would require a revised R1.1Proposed R1: ADD: Require that its operating personnel identify, at the time of issuance, when the Operating Instruction is being issued to alleviate or avoid an Emergency. Proposed R1.2: ADD: Request recipient use 3 part communication when the Operating Instruction is being issued to alleviate or avoid an Emergency. Proposed R1.3: change the word "correct" to "understood" Requirement 2: GSOC believes R2 should be eliminated as redundant with the systematic approach to training requirements of PER-005-2(Operating Personnel Training) which are applicable to all Bas, RCs and TOPs. Communication protocols must be included in each company's specific reliability-related task list. GSOC believes the current proposal of COM-002-4 still contains ambiguities that can be resolved with the following alternative. GSOC recognizes the following alternative in that it parallels th recently FERC approved CIP-003-5. GSOC believes this alternative more accurately captures those DPs that receive Operating Instructions associated with the reliability of the BES. 4.1.2 Distribution Provider that: 4.1.2.1 Has capability to shed 300 MW of more of load in a single manually initiated operation.4.1.2.2 Has switching obligation related to Any Cranking Path and group of Elements meeting the initial switching requirements from a Blackstart Resource up to and including the first interconnectio point of the starting station service of the next generation unit(s) to be started.
		Response: The OPCP SDT disagrees with the suggested edits to Requirement R1. R currently requires entities to set protocols for use when issuing Operation Instructions. The Requirement calls for the development of protocols to cover ALL Operating Instructions. How an entity must use the protocols for Operating Instructions during Emergencies is covered by a separate requirement. Please see the Summary Response to Question 1 for responses to your comments regarding the inclusion of Distribution Providers and training.



Organization	Yes or No	Question 2 Comment
Electric Reliability Council of Texas, Inc.	No	This standard is not responsive to the Blackout Recommendation #26. The prevention of miscommunication is the current focus of this standard, while nothing in the Blackout Report commented on an instruction not being followed due to miscommunication. Rather, the Blackout Report focused on a lack of situational awareness based on one entity not understanding what the other entity was describing because different entities used different terminology. Flow of communications or "who" should be notified was also lacking in addition to "what" needed to be communicated. The report highlighted that effective communication was based on communication of important and prioritized information to each other in a timely way. In essence, this focuses on communication protocols to prevent miscommunications while Recommendation #26 focused on effective communication protocols that improve situational awareness, where the former is process and the latter is substantive. That being said, and regardless of whether COM-002-4 addresses the August 2003 Blackout Report Recommendation number 26 or not, ERCOT ISO can support the COM-002-4 standard. However, ERCOT ISO believes the draft standard could be improved and offers suggestions in Question 4 below, for the OPCP SDT's consideration.
Oncor Electric Delivery Company LLC	No	COM-002-4 goes beyond the August 2003 Blackout Report Recommendation number 26, FERC Order 693 for neither identify requirements for normal operations. EOP-001-2, R3.1 and COM-002-2, R2 already address the requirements of the Blackout Report and FERC Order 693. The intent of the 2003 Blackout recommendation was to provide tighter communication during emergency situations. Due to the ambiguity that exists between Operating Instruction and Operating Instruction during an Emergency, we believe that this recommendation was not addressed. In addition, the NERC BOT directed the NERC Operating Committee (OC) to evaluate the COM standards (previously COM-003) and responses from the Reliability Issues Steering Committee (RISC), the Independent Experts Review and NERC Management. Their



Organization	Yes or No	Question 2 Comment
		report issued September 23, 2013 to the NERC BOT Chairman identifies the importance of clear communications but found no evidence including the NERC event analysis process nor recent events which supports that non-emergency communications represents a reliability gap. The OC created a guideline for verbal communications which provides industry best practices and recommended utilizing the guideline to promote continuous improvement versus implementing a mandatory standard.
NRECA	No	See response to Question 1
TIMEOT	110	See response to Question 1
Exelon Corp and its affiliated business units	No	2003 Blackout Report Recommendation No. 26 reads:"Tighten communications protocols, especially for communications during alerts and emergencies. Upgrade communication system hardware where appropriate (footnote omitted). NERC should work with reliability coordinators and control area operators to improve the effectiveness of internal and external communications during alerts, emergencies, or other critical situations, and ensure that all key parties, including state and local officials, receive timely and accurate information. NERC should task the regional councils to work together to develop communications protocols by December 31, 2004, and to assess and report on the adequacy of emergency communications systems within their regions against the protocols by that date."While Exelon believes that COM-002-4 goes beyond the Recommendation and includes the requirement to implement communication protocols for operating BES elements in non-emergency and other non-critical situations, Exelon also recognizes that the NERC Board believes that the words "especially for" in the recommendation are the reason to include a standard for normal communications. We also understand that in paragraph 540 of Order No. 693, FERC directed the ERO to expand the applicability of the communication standard to distribution providers (DP's) but that directive tied



Organization	Yes or No	Question 2 Comment
		back to communications protocols "especially for communications during alerts and emergencies." Although Recommendation 26 addresses "key parties" and FERC directive addresses DP's in the context of Blackout Recommendation No. 26, we don't believe that either was intended to include DP's and GOP's for non-emergency Operating Instructions communications.
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The United Illuminating Company	No	
Ingleside Cogeneration LP	Yes	COM-002-4 adds requirements that call for protocols that add precision to operations communications as called for in both documents. However, in the latest draft, ICLP believes the compliance approach has been modified in a manner that ensures that routine Operating Communications are conducted using a common protocol - but do not involve significant tracking resources. In addition, the use of operator training and regular review of its effectiveness is consistent with other NERC standards related to operator capabilities. As it is written now, CIP-002-4 introduces new expectations related to routine communications, but only puts incremental pressures on existing processes and equipment necessary to address them.
	1	
CenterPoint Energy Houston Electric LLC	Yes	CenterPoint Energy agrees that the COM-002-4 standard addresses both the August 2003 Blackout Report Recommendation 26 and FERC Order 693.
SERC OC Review Group		We are concerned that this draft goes further than mentioned in the blackout recommendation that NERC should work with reliability coordinators and control area operators to improve the effectiveness of internal and external communications



Organization	Yes or No	Question 2 Comment
		during alerts, emergencies, or other critical situations. This group feels that the modifications recommended will add further clarity in communications and work towards the goal identified in the Black Report recommendation number 26.
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Salt River Project	Yes	
Southern Company; Southern Company Services, Inc; Alabama Power Company; Georgia power Company; Gulf Power Company; Mississippi Power Company; Southern Company Generation and Energy Marketing	Yes	
Florida Municipal Power Agency	Yes	
Arizona Public Service Co.	Yes	
DTE Electric	Yes	
Bonneville Power Administration	Yes	
Idaho Power Company	Yes	
Public Utility District No.1 of Snohomish County	Yes	



Organization	Yes or No	Question 2 Comment
Liberty Electric Power LLC	Yes	
Wisconsin Electric Power Company	Yes	
Clark Public Utilities	Yes	
Virginia State Corporation Commission, Member OC	Yes	
Manitoba Hydro	Yes	
American Transmission Company, LLC	Yes	
Platte River Power Authority	Yes	
MISO	Yes	
PJM Interconnection	Yes	
Northeast Utilities	Yes	
Tri-State Generation and Transmission Association Inc.	Yes	
The Empire District Electric Company	Yes	



## 3. Do you agree with the VRFs and VSLs for the Requirements? If not, please explain.

Summary Consideration: The OPCP SDT thanks all commenters who submitted comments for Question 3. The following is provided as a summary response to the comments on Question 3. Any necessary additional responses are provided to individual commenters below. It should be noted that VSLs must be developed based on established criteria. Please refer to the "VRF/VSL Justification" document posted with the standard on the project page for additional information.

Several commenters stated that they did not feel a Severe VSL was appropriate for Requirement R1. The OPCP SDT has reviewed these comments but maintains the position that if an entity fails to include three-part communication in its communication protocols or the entity does not have any documented communication protocols, then that violation would warrant a Severe VSL as those elements represent the most significant elements of Requirement R1. Feedback received during development indicated a preference for a gradated VSL for Requirement R1 with higher importance placed on more critical protocols.

Other comments noted the Lower VSL for Requirement R4 is triggered by an entity failing to evaluate its documented communication protocols for Requirement R1 every 12 calendar months, but there is not a cap on the amount of time that may pass between evaluations and the violation results in a greater VSL. The OPCP SDT discussed the issue and determined that the requirement to perform the review is more important than penalizing an entity for the amount of time they missed the time window. The purpose of the requirement is to encourage entities to perform periodic reviews each year. The team determined that 12 months was the appropriate maximum period and that missing the 12-month time window should be the only demarcation point necessary.

Commenters also stated they felt the VSLs for Requirements R5-R7 were not appropriate because the difference between a Severe VSL and a Moderate VSL is triggered by whether or not an Emergency situation occurred. The OPCP SDT provided justification for the VSLs in the "VRF/VSL Justification" document posted on the project page. If an entity, when issuing an Operating Instruction during an Emergency, did not use three-part communication or take an alternative action if the receiver does not respond, yet instability, uncontrolled separation, or cascading failures did not occur as a result, the entity violated the requirement with a "Medium" VSL. The value of "Medium" is justified based upon a significant element (or a moderate percentage) of the required performance being missing, but the performance or product measured still has significant value in meeting the intent of the requirement, which is to avoid action or inaction that is harmful to the reliability of the Bulk Electric System. If an entity, when issuing an Operating Instruction during an Emergency, did not use three-part communication or take an alternative action if the receiver does not respond, and instability, uncontrolled separation, or cascading failures occurred as a result, the entity violated the requirement with a "Severe" VSL. The value of "Severe" is justified because the performance outcome does not meet the intent of the requirement.

In response to comments, the OPCP SDT made non-substantive clarifying changes to Measures M2, M4, M6, and M7.

Posted: March 27th, 2014

Consideration of Comments: Project 2007-02 COM-002-4



Organization	Yes or No	Question 3 Comment
Northeast Power Coordinating Council	No	Regarding Requirement R4, the LOW VSL suggests that an entity is assigned a LOW VSL if assessments are conducted more than 12 months apart. There is no maximum or "cap" to the delayed assessment, and hence an entity may be 18, 19 or more months late in conducting the next assessment. In other standards this could well be assessed a MEDIUM or HIGH or even a SEVERE violation, depending on the time period that an entity failed the 12 month update requirement. Absent this "cap", or staggered caps, the proposed HIGH and SEVERE VSLs can only be assessed based on whether or not there was ever an assessment, even if the last assessment was done 3 or 4 years prior to an audit. This is inconsistent with the general guideline for VSLs. Regarding Requirement R5, the MEDIUM VSL and SEVERE VSL are identical, except the latter has a condition that is associated with the impact of the violation. This is inconsistent with the intent of the VSL, which is to assess the "extent to which" the requirement was violated, not the impact of the violation which should be captured by the VRF. This is also inconsistent with the VSL principle and guideline. Suggest removing the MEDIUM VSL, and the condition under the proposed SEVERE VSL be: "AND instability, uncontrolled separation, or cascading failures occurred as a result." The same comments apply for Requirements R6 and R7.We believe that the VRFs/VSLs should be modified to better reflect the stated intent of the NERC Board of Trustees November 19, 2013 Resolution, which is to enforce 'zero tolerance' only for failure to use 3 part communications by the issuer or recipient of an Operating Instruction when it is issued to alleviate or avoid an Emergency.
NERC Standards Review Forum	No	R1, The NSRF does not understand why there is a Severe VSL for normal everyday Operating Instructions. This Severe VSL is imposing the "zero defect" language that



Organization	Yes or No	Question 3 Comment
		the industry is trying to move away from. We understand if there were no protocols as in "The responsible entity did not develop any documented communications protocols as required in Requirement R1", but not the sub requirements of R1.2 and R1.3. The highest VSL should be High. Save the Severe VSL for R5, R6, and R7.
Colorado Springs Utilities N	No	We do not agree with the following VSLs:1) R4: The LOW VSL suggests that an entity is assigned a LOW VSL if assessments are conducted more than 12 months apart. There is no max or "cap" to the delayed assessment and hence an entity may be 18, 19 or more months late in conducting the next assessment. In other standards, this could well be assessed a MEDIUM or HIGH or even a SEVERE violation, depending on the time period that an entity failed the 12 month update requirement. Absent this "cap", or staggered caps, the proposed HIGH and SEVERE VSLs can only be assessed based on whether or not there was ever an assessment, even the last assessment was done 3 or 4 years prior to an audit. This is inconsistent with the general guideline for VSLs.2)
		R5: The MEDIUM VSL and SEVERE VSL are identical, except the latter has a condition that is associated with the impact of the violation. This is inconsistent with the intent of the VSL, which is to assess the "extent to which" the requirement was violated, not the impact of the violation which should be captured by the VRF. This is also inconsistent with the VSL principle and guideline. We suggest removing the MEDIUM VSL, and the condition under the proposed SEVERE VSL that: "AND Instability, uncontrolled separation, or cascading failures occurred as a result."3) R6: Same comments as in R5.4) R7: Same comments as in R5.
Southern Company; Southern Company Services,Inc; Alabama Power Company;	No	R3 VSL is listed as high and severe; The concern is that if an operator receives instruction and performs accurately using 3-part, but can't show initial training for Operating Instruction and Operating instruction during an Emergency, would this



Organization	Yes or No	Question 3 Comment
Georgia power Company; Gulf Power Company; Mississippi Power Company; Southern Company Generation and Energy Marketing		warrant a high or severe VSL. While there is the potential of risk if Operating Instructions are received prior to being trained, this should not somehow imply that incorrect operations were performed as a result of no training. The severe category should be reserved only for those instances in which Operating Instructions were received prior to being trained *and* which resulted in an emergency operation or reliability issue. As a result, we suggest "demoting" each existing VSL to a lower level, and editing the High and Severe VSL and limit it to only those instances that resulted in an emergency operation or reliability issue (suggestions provided below). Low - An individual operator at the responsible entity receiving an Operating Instruction prior to being trained. Moderate - An individual operator at the responsible entity received an Operating Instruction during an Emergency prior to being trained. High - An individual operator at the responsible entity received an Operating Instruction prior to being trained *and* resulting in an emergency operation or reliability issue. Severe - An individual operator at the responsible entity received an Operating Instruction during an Emergency prior to being trained *and* resulting in an emergency operation or reliability issue.
DTE Electric	No	The evidence needed to avoid violation is not clear. The VSL for R2 is not reasonable and an auditing nightmare. It should state an operator did not receive training on the documented communication protocol. Adding "prior to issuing an operating instruction" cannot be determined without excessive investigation. A check that all operators received training is appropriate. Same issue with R3 as listed for R2.
SPP Standards Review Group	No	We suggest changing the Moderate VSLs for R5, R6 and R7 to Lower. If the failure to completely follow through with the protocols contained in R1 had no adverse impact on the situation, then this VSL is purely administrative and is not deserving of being Moderate. The Lower and Moderate VSLs for R1 contain specific details regarding



Organization	Yes or No	Question 3 Comment
		each of the Parts referenced in each of the VSLs. In the High and Severe VSLs for R1 only reference is made to the Parts while the details contained in the Parts is not included in the VSLs. Either the details should be removed from the Lower and Moderate VSLs or the details need to be included in the High and Severe VSLs.
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Dominion	No	We believe that the VRFs/VSLs should be modified to better reflect the stated intent of the NERC Board of Trustees November 19th, 2013 Resolution, which is to enforce 'zero tolerance' only for failure to use 3 part communications by the issuer or recipient of an Operating Instruction when it is issued to alleviate or avoid an Emergency.
ACES Standards Collaborators	No	(1) We disagree with some of the requirements of including training and several aspects of the communication protocols. Since we disagree with the underlying requirements, we also disagree with the corresponding VSLs and VRFs.
	1	
ISO/RTO Council Standards Review Committee	No	We do not agree with the following VSLs:i) R4: The LOW VSL suggests that an entity is assigned a LOW VSL if assessments are conducted more than 12 months apart. There is no max or "cap" to the delayed assessment and hence an entity may be 18, 19 or more months late in conducting the next assessment. In other standards, this could well be assessed a MEDIUM or HIGH or even a SEVERE violation, depending on the time period that an entity failed the 12 month update requirement. Absent this "cap", or staggered caps, the proposed HIGH and SEVERE VSLs can only be assessed based on whether or not there was ever an assessment, even the last assessment was done 3 or 4 years prior to an audit. This is inconsistent with the general guideline for VSLs.ii) R5: The MEDIUM VSL and SEVERE VSL are identical, except the latter has a



Organization	Yes or No	Question 3 Comment
		condition that is associated with the impact of the violation. This is inconsistent with the intent of the VSL, which is to assess the "extent to which" the requirement was violated, not the impact of the violation which should be captured by the VRF. This is also inconsistent with the VSL principle and guideline. We suggest removing the MEDIUM VSL, and the condition under the proposed SEVERE VSL that: "AND Instability, uncontrolled separation, or cascading failures occurred as a result."iii) R6: Same comments as in R5.iv) R7: Same comments as in R5.
Liberty Electric Power LLC	No	The "Moderate" VSL for R6 should be modified in the same manner as the "Severe" VSL. In addition to repeating the Directive, the RE needs to fail to take action as directed. Suggest the following language: "AND the RE failed to take action as requested by the issuer of the Operating Instruction".
NRECA	No	Will need to be modified dependent on applicability modifications.
Georgia Transmission Corporation	No	Modify in accordance with selected alternative drafted above.
Independent Electricity System Operator	No	We do not agree with the following VSLs:i) R4: The LOW VSL suggests that an entity is assigned a LOW VSL if assessments are conducted more than 12 months apart. There is no max or "cap" to the delayed assessment and hence an entity may be 18, 19 or more months late in conducting the next assessment. In other standards, this could well be assessed a MEDIUM or HIGH or even a SEVERE violation, depending on the



Organization	Yes or No	Question 3 Comment
		time period that an entity failed the 12 month update requirement. Absent this "cap", or staggered caps, the proposed HIGH and SEVERE VSLs can only be assessed based on whether or not there was ever an assessment, even the last assessment was done 3 or 4 years prior to an audit. This is inconsistent with the general guideline for VSLs.ii) R5: The MEDIUM VSL and SEVERE VSL are identical, except the latter has a condition that is associated with the impact of the violation. This is inconsistent with the intent of the VSL, which is to assess the "extent to which" the requirement was violated, not the impact of the violation that should have been reflected by the VRF. This is also inconsistent with the VSL principle and guideline. We suggest removing the MEDIUM VSL, and the condition under the proposed SEVERE VSL that: "AND Instability, uncontrolled separation, or cascading failures occurred as a result."iii) R6: Same comments as in R5.iv) R7: Same comments as in R5.
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American Electric Power	No	The AND qualifier provided for R5 which qualifies that Instability, uncontrolled separation, or cascading failures occurred, should also be used for R3.
CenterPoint Energy Houston Electric LLC	No	CenterPoint Energy does not agree with the Severe VSL for Requirement R1. The Company strongly believes that the focus of any Reliability Standard should be on enhancing the reliable operation of the BES and not on documents. Simply failing to document a procedure should never warrant a Severe VSL as long as the entity is operating according to the Standard.
Georgia System Operations Corporation	No	R1 - GSOC requests that there not be applied a Severe VSL for normal everyday Operating Instructions.



Organization	Yes or No	Question 3 Comment
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Electric Reliability Council of Texas, Inc.	No	R2 and R3 VSLs should not have the "during an Emergency" distinction between a high and severe VSL. VSL's grade the severity or "how bad" did an entity violate a requirement. The risk and situation of non-compliance is included in the VRF and not the VSL. ERCOT ISO would recommend percentage indicator across the severity levels as detailed in the VSL guideline document.R5-R7 VSLs should remove "Instability, uncontrolled separation, or cascading failures occurred as a result." as that stipulation is not appropriate in the VSLs. The resulting impact of non-compliance is addressed in the enforcement process and not in how severe an entity did not comply with a requirement. ERCOT ISO suggests a binary or severe only VSL to coincide with the VSL Guideline document. Additionally, ERCOT ISO would recommend adding "at least" in the R5 VSL to better clarify that a minimum of one of the three actions is required and not all three.The responsible entity that issued an Operating Instruction during an Emergency did not take 'at least' one of the following actions:
ReliabilityFirst	No	ReliabilityFirst submits the following comments related to the VSL for the OPCP SDTs consideration:1. Requirement R4 VSL - For the Lower VSL, ReliabilityFirst recommends gradating the number of months an entity is late in assessing adherence and effectiveness of the documented communications protocols. For example, there is a big difference if an entity is late by one month or 12 months. As drafted, an entity that is late by 12 months would still fall under the Lower VSL. ReliabilityFirst recommends gradating the VSLs in three month intervals. For example, the last "AND" text for the Lower VSL would read: "The responsible entity exceeded twelve (12) but less than or equal to fifteen (15) calendar months between assessments." The Moderate VSL would read; "The responsible entity exceeded fifteen (15) but less than or equal to eighteen (18) calendar months between assessments." The High and



Organization	Yes or No	Question 3 Comment
		Severe VSLs would follow the same rationale.2. Requirement R5 VSL - Requirement R5 does not speak to instability, uncontrolled, separation, or cascading failures occurring as a result of correctly issuing an oral two-party, person-to-person Operating Instruction. To be consistent with the requirement, ReliabilityFirst recommends deleting the text after the AND qualifier and deleting the Moderate VSL. Hence, there will only be one Severe VSL for this requirement.3. Requirement R6 VSL - Similar comment as the Requirement R5 VSL4. Requirement R7 VSL - Similar comment as the Requirement R5 VSL
Manitoba Hydro	Yes	Although Manitoba Hydro agrees with the VRFs and VSLs for the Requirements, we have the following comments: 1) VSLs, R2 - the term 'individual operator' is used in this VSL where throughout the standard operating personnel is used. 2) VSLs, R5 - text of VSLS refer to Requirement R6 instead of R5.3) VSLs, R6 - inconsistent drafting as the words 'that received an oral,' is not included here, but does appear in the VSL for R7.4) VLSs, R5, R6, R7 - the final criteria for a Severe VSL is for a specific outcome of non-compliance which does not seem appropriate when measuring compliance. Depending on the outcome of the circumstances, the VSL may be High or Severe. The outcome itself is not something that is related to the entity's compliance with the standard. The entity may take the same action and comply to the same degree and by virtue of the outcome alone they are moved from a High to a Severe VSL.
Salt River Project	Yes	
Florida Municipal Power Agency	Yes	



Organization	Yes or No	Question 3 Comment
Arizona Public Service Co.	Yes	
Bonneville Power Administration	Yes	
Luminant	Yes	
Idaho Power Company	Yes	
Public Utility District No.1 of Snohomish County	Yes	
Wisconsin Electric Power Company	Yes	
Ingleside Cogeneration LP	Yes	
Clark Public Utilities	Yes	
Virginia State Corporation Commission, Member OC	Yes	
American Transmission Company, LLC	Yes	
Platte River Power Authority	Yes	
MISO	Yes	
PJM Interconnection	Yes	



Organization	Yes or No	Question 3 Comment
Northeast Utilities	Yes	
Oncor Electric Delivery Company LLC	Yes	
Tri-State Generation and Transmission Association Inc.	Yes	
The Empire District Electric Company	Yes	
SERC OC Review Group		We believe that the VRFs/VSLs should be modified to better reflect the stated intent of the NERC Board of Trustees November 19th, 2013 Resolution, which is to enforce 'zero tolerance' only for failure to use 3 part communications by the issuer or recipient of an Operating Instruction when it is issued to alleviate or avoid an Emergency. VSL for R1: Modify Severe to include any instance where entity either (1) failed to identify, at the time of issuance, that the Operating Instruction is being issued to alleviate or avoid an Emergency or (2) failed to request recipient use 3 part communication when the Operating Instruction was issued to alleviate or avoid an Emergency Current VSL for R1 language: The responsible entity did not include Requirement R1, Part 1.2 in its documented communications protocols OR The responsible entity did not include Requirement R1, Part 1.3 in its documented communications protocols OR The responsible entity did not develop any documented communications protocols as required in Requirement R1. Proposed VSL for R1 language: Moderate - The responsible entity did not require the issuer and receiver of an oral or written Operating Instruction to use the English language, unless agreed to otherwise, as required in Requirement R1, Part 1.2. An alternate language may be used for internal operations. Severe - The responsible entity did not include Requirement R1, Part 1.1, in its documented communications protocols OR Requirement R1, Part 1.3 in its documented communications protocols OR



Organization	Yes or No	Question 3 Comment
		responsible entity did not include Requirement R1, Part 1.4 in its documented communications protocols OR The responsible entity did not develop any documented communications protocols as required in Requirement R1 OR the responsible entity either (1) failed to identify, at the time of issuance, that the Operating Instruction is being issued to alleviate or avoid an Emergency or (2) failed to request recipient use 3 part communication when the Operating Instruction was issued to alleviate or avoid an Emergency. VSL for R3: This Group recommends that the "High VSL for R3" be deleted. The reason for the High VSL deletion is to align with the concept that the standard should provide that compliance with the standard should only entail assessing whether an entity has utilized their documented communications for Operating Instructions that are not issued during an Emergency.VSL for R2, R5, R6, and R7: If the OPCP SDT modifies the requirements based on this Group's recommendation VSL for R2, R5, R6, and R7 can be deleted except for any sections that are applicable in revised requirements.



4. Do you have any additional comments? Please provide them here.

Summary Consideration: The OPCP SDT thanks all parties who took the opportunity to comment on Question 4. The responses to comments submitted for Question 4 are provided in individual responses below. Many of the same themes carry from Question 1.

Organization	Yes or No	Question 4 Comment
Salt River Project	No	
Southern Company; Southern Company Services,Inc; Alabama Power Company; Georgia power Company; Gulf Power Company; Mississippi Power Company; Southern Company Generation and Energy Marketing	R1.2: Correct the formatting of the third bullet to match the first two so that it is clear that there are three options permitted not just two with a sub bullet to number two.  R3: Is worded a little confusing. Suggestion would be to add the text below. Each Distribution Provider and Generator Operator shall conduct initial training for each of its operating personnel who can receive an oral two-party, person-to-person Operating Instruction prior to that individual operator receiving an oral two-party, person-to-person Operating Instruction that requires them to either: [Violation Risk Factor: Low][Time Horizon: Long-term Planning] o Repeat, not necessarily verbatim, the Operating Instruction and receive confirmation from the issuer that the response was correct, or o Request that the issuer reissue the Operating Instruction.	
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		R4 - In NERC's own Q&A document for RAI prepared by the Risk-Based Reliability Compliance Working Group (RBRCWG), the following statements are made: "An entity can voluntarily establish internal controls designed to reduce its control risk, which could have a positive influence on the scoping of compliance monitoring by the Regional Entity. Conversely, the entity can voluntarily elect to not establish internal controls or share them with the Regional Entity." This is inconsistent with the direction



Organization	Yes or No	Question 4 Comment
		of the proposed Standard COM-002-4, R4. This not only requires an internal control, but also requires that the control be shared with the Regional Entity (during audits). Also, consider that an entity can develop and implement a robust communication protocol consistent with COM-002-4 requirements and flawlessly follow its communication protocol, yet be found in violation of COM-002-4 by failing to demonstrate that it has adequate (subjective) management (internal) controls in place. This is inconsistent with the RAI guidance provided by NERC regarding the voluntary nature of internal controls. So, in principle, internal controls should not be dictated in a reliability standard. This goes against the principle of "Results-Based" standards. The intended result is effective communications. This can be attained with Requirements 1 through 3. No one will argue that internal controls won't help ensure that the desired results are achieved. However, Requirement 4 is not absolutely necessary for the results to be achieved, and therefore, should not be included in the standard and should be removed.
		Response: The OPCP SDT will share this comment with the NERC staff coordinating the RAI documents. It is not an accurate statement that an entity can be found to have violated COM-002-4 by failing to demonstrate that it has adequate controls in place. The entity will be measured based on the language of the requirement, which requires an assessment, feedback to operating personnel, and corrective actions as appropriate.
		Definition of Operating Instruction: The term "command" in the definition of Operating Instruction implies authority, and Southern believes it should be made clear that Operating Instructions (for purposes of this standard) are commands issued by those functional entities that are expressly granted the responsibility and authority by the NERC Reliability Standards to take actions or direct the actions of others to ensure the reliability of the BES. These are the Balancing Authority, Reliability Coordinator and Transmission Operator only. No other functions are expressly authorized in the NERC Reliability Standards to issue a command. Our proposed definition Operating Instruction should be: Operating Instruction - A command originated by a Balancing Authority, Transmission Operator or Reliability Coordinator responsible for the Real-



Organization	Yes or No	Question 4 Comment
		time operation of the interconnected Bulk Electric System to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. (A discussion of general information and of potential options or alternatives to resolve Bulk Electric System operating concerns is not a command and is not considered an Operating Instruction.)
		Response: Definitions must be written to provide flexibility to be used in other Reliability Standards. Therefore, the proper place to note the functional entities is the requirement text itself. The requirements in the standard provide the bounds that only Operating Instructions issued by BAs, TOPs, and RCs are applicable to the standard.
		Measures:M4: The inclusion of Emergency here is inappropriate due to the non-inclusion of Emergency in R4. Also change the RSAW to reflect this change as well. Suggested rewording:"Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide evidence of its assessments, including spreadsheets, logs or other evidence of feedback, findings of effectiveness and any changes made to its documented communications protocols developed for Requirement R1 in fulfillment of Requirement R4. The entity shall provide evidence that it took appropriate corrective actions as part of its assessment for all identified instances where operating personnel did not adhere to the protocols developed in Requirement R1"
		Response: Requirement R4 is written broadly to cover assessment of Operating Instructions under all operating conditions. The measure adds some additional clarity on certain situations that are of particular interest and almost certainly would call for corrective action. However, the OPCP SDT team revisited the language of M4 and revised the language to better track the requirement language. The drafting team also addressed this issue in the FAQ document posted on the project page. The following response was provided: "The purpose of COM-002-4 is 'To improve communications for the issuance of Operating Instructions with predefined communications protocols to reduce the possibility of miscommunication that could



Organization	Yes or No	Question 4 Comment
		lead to action or inaction harmful to the reliability of the Bulk Electric System (BES).' If the deviation from the protocol contributed to an emergency, the purpose of this standard was not met. The entity must determine what caused that deviation and address any necessary corrective actions."
		Definition of Emergency Any abnormal system condition that requires automatic or immediate manual action to prevent or limit the failure of transmission facilities or generation supply that could adversely affect the reliability of the Bulk Electric System. If read literally, EVERY breaker operation on the system IS an EMERGENCY. This causes a great deal of concern. From a DP and GOP standpoint, the RSAW and technical justification wording states that an attestation that no emergency had been called requiring a three part response would suffice for evidence. The rationale and technical justification document has some very good explanations of the INTENT of the drafting team and how they want the industry to view the standard requirements. If the standard and the subsequent audits adhered ONLY to what was in the justification document, then there should be little or no concerns. Unfortunately, the justification document carries no statutory weight and the standard as written does.
		Response: Since an entity will be required to file a Reportable Event for damage or destruction of a Facility (damage or destruction of a Facility within its Reliability Coordinator Area, Balancing Authority Area, or Transmission Operator Area that results in actions to avoid a BES Emergency), BES Emergency requiring public appeal for load reduction, BES Emergency requiring system-wide voltage reduction, BES Emergency requiring manual firm load shedding, and BES Emergency resulting in automatic firm load shedding per EOP-004-2, entities will be aware of the Emergency. This does not include every breaker operation.
	1	
Arizona Public Service Co.	No	
DTE Electric	No	None



Organization	Yes or No	Question 4 Comment
Bonneville Power Administration	No	
Idaho Power Company	No	
Virginia State Corporation Commission, Member OC	No	
SERC OC Review Group	Yes	The SERC OC Review Group understands the position that the OPCP SDT is working in and greatly appreciates the patience and dedication shown in developing this draft standard. Thank you. The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Review Group only and should not be construed as the position of the SERC Reliability Corporation, or its board or its officers.  Response: The OPCP SDT thanks you for your comments.
North American Generator Forum - Standards Review Team (NAGF-SRT)	Yes	1) R1.3 and R3 should also allow the receiver of an Operating Instruction to respond by explaining that a requested action cannot be performed (e.g., due to safety, equipment, regulatory, or statutory requirements as described in TOP-001 R3 and IRO-001 R8). The requirement to either repeat or request that the instruction be reissued does not account for the realistic situation that an entity may not be able to perform an Operating Instruction.
		Response: Requirement R1 only describes what should be covered in an entity's documented communication protocols. R3 only includes the bullets to identify what an operator must be trained to do. Therefore, what action an entity may take is not relevant for these requirements. However, to address the concern, it is important that the issuer and receiver understand the Operating Instruction prior to determining whether the action can or cannot be completed. 2) Specific to R.6,



Organization	Yes or No	Question 4 Comment
		consideration should be given to revise the verbiage from, "during an Emergency" to "identified by the sender as constituting an Emergency directive." The rational for the recommendation is offered to provide clarity to the Requirement, as it is anticipated that there will be cases when it is not clear the Operating Instruction is associated with an Emergency. Additionally, the definition of "Emergency" in the NERC Glossary is broad and consequently it may be difficult, at times, to determine which inputs are subject to COM-002-4 requirements, especially if the TO or TOP calls a plant operator directly rather than going through the respective dispatchers. Note: On the 1/17/14 COM-002-4 OPCP SDT webinar the question was asked, how a DP or GOP would know that an Operating Instruction occurred during an Emergency. The drafting team stated that after every Operating Instruction the DP should call its TOP to determine if the Operating Instruction occurred during and Emergency. The NAGF-SRT once again reiterates that it would be more efficient and the industry would benefit as a whole, if the sender of the Operational Instruction, states the instruction is associated with an Emergency.
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "Separately listing out Requirements R5, R6, and R7 and using 'Operating Instruction during an Emergency' in them does not require a different set of protocols to be used during Emergencies or mandate the identification of a communication as an 'Operating Instruction during an Emergency.' The same protocols are required to be used in connection with the issuance of Operating Instructions for all operating conditions. Their use is measured for compliance/enforcement differently using the operating condition as an indicator of which compliance/enforcement approach applies. In other words, it is not the drafting team's expectation that the operator must differentiate between Emergency and non-Emergency Operating Instructions." In order to draft appropriate VSLs, separate requirements were needed for the different operating conditions. The protocols are the same for all operating conditions. The OPCP SDT did not intend the phrase "during an Emergency" to carry an obligation to identify the communication as one that constitutes an Emergency directive.



Organization	Yes or No	Question 4 Comment
		Please see the response to Question 1, which addresses the concern regarding the identification of an Emergency.  3) Specific to Measures M5 and M6, which contain language associated with the issuer
		and the recipient both maintaining evidence of two-party communication respectively. It is recommended that M5 be revised such that the all associated evidence is maintained by the issuer and M6 be deleted in its entirety. Consolidating the evidence requirements would benefit the industry by reducing duplication of efforts, associated with maintaining evidence by different entities, in support of the same requirement.
		Response: Each entity must provide its evidence of compliance. No entity can be required to provide evidence for another entity's compliance.
Northeast Power Coordinating Council	Yes	Regarding Part 1.4, it must be considered that some ISOs issue multiple-party burst Operating Instruction to Generator Operators through electronic means.
		Response: Requirement R1, Part 1.4 only applies to written or oral single-party to multiple-party burst Operating Instructions. An electronic signal is not covered in this standard. If the electronic communication is written, the entity must put in place the ability to ensure that the Operating Instruction was received by at least one receiver of the Operating Instruction.
		Regarding Part 1.6, the requirement is vague and needs to be clarified for Registered Entities to know how to comply. How would one "specify the nomenclature" system wide?
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "COM-002-4, while reintroducing the concept of line identifiers, limits the scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie



Organization	Yes or No	Question 4 Comment
		substations) for Operating Instructions. This supports both parties being familiar with each other's interface Elements and Facilities, minimizing hesitation and confusion when referring to equipment for the Operating Instruction." The nomenclature is not specified "system-wide."
		Regarding Requirements R2 and R3, those "training" requirements aren't necessary. Responsible Entities must adhere to the Requirements of NERC Standards and how they accomplish this should not be dictated by a standard's requirement. Under RAI principles, NERC and Regions can determine what type of monitoring is appropriate for Responsible Entities' compliance with the new COM Standard based on the quality of their Training programs. This would further support reliability by changing the requirement from a one-time audit (i.e., initial training) to an ongoing assessment. The proposed standard still contains requirements that mandate the use of, and training to include 3 part communications during issuance of all Operating Instructions, including those issued during non-Emergency situations. As stated in the Rationale and Technical Justification document the proposed Measures and RSAW don't specifically require that auditors verify compliance of this for the Requirements (and associated Measures), however a strict read leads us to a different conclusion. Under the RSAW for R1 it states that the entity shall provide its documented communications protocols developed for this requirement and the auditor shall review the documented communications protocols provided by the entity and ensure they address the Parts of R1 (including the use of 3 part communications). The RSAW contains similar actions relative to Requirements R2 and R3 in that the entity is to provide evidence consisting of agendas, learning objectives, or course materials that it provides pursuant to these requirements. Given this, an auditor can enforce to a 'zero defect tolerance' if the auditor chooses to do so, and in fact would argue that an audit would be deficient if it failed to validate whether the learning objective included ensuring that 3 part communication was used during issuance or receipt of each Operating Instruction. Suggest that the training requirements contained with R2 and R3 be removed and placed within the PER-005 Operations Pers



Organization	Yes or No	Question 4 Comment
		Response: Please refer to the summary response in Question 1 above.
		There are no clear and concise differences between Requirements R1, R5 and R6. This creates uncertainty as to whether the Operating Instruction is being issued to alleviate or avoid an Emergency. Absent a Requirement that the issuer make a definitive statement as to whether an Operating Instruction is being issued to alleviate or avoid an Emergency, neither the recipient (during) nor an auditor (after) would be able to make such determination. Suggest revising Requirement R1 so that it applies to all Operating Instructions, but requires that those being issued to alleviate or avoid an Emergency be specifically identified as such and that the issuer explicitly request that the recipient confirm their understanding through use of 3 part communication. Remove Requirements R5, R6 and R7 (incorporating items deemed necessary by the OPCP SDT as bullets or Parts of R1). Suggested rewording for Part 1.1:1.1. Require that its operating personnel identify, at the time of issuance, that the Operating Instruction is being issued to alleviate or avoid an Emergency. O Request recipient use 3 part communication when the Operating Instruction is being issued to alleviate or avoid an Emergency.Revise M1, VRF/VSLs and RSAW so that strict compliance with use of 3 part communication is only applied when an Operating Instruction is issued to alleviate or avoid an Emergency as identified by the issuer at the time of issuance. Suggested revisions to M1:M1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide its documented communications protocols developed for Requirement R1. For each Operating Instruction is issued to alleviate or avoid an Emergency; entity shall provide evidence that it identified such at time Operating instruction was issued (R1.1) and requested recipient use of 3 part communication (R1.2). VSL for R1 - modify Severe to include any instance where entity either (1) failed to identify, at the time of issuance, that the Operating Instruction is being issued to alleviate or avoid
		Response: The OPCP SDT has not modified Measure M1 as suggested above because the entity's performance is limited to the development of the protocols. The OPCP



Organization	Yes or No	Question 4 Comment
		SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "Separately listing out Requirements R5, R6, and R7 and using 'Operating Instruction during an Emergency' in them does not require a different set of protocols to be used during Emergencies or mandate the identification of a communication as an 'Operating Instruction during an Emergency.' The same protocols are required to be used in connection with the issuance of Operating Instructions for all operating conditions. Their use is measured for compliance/enforcement differently using the operating condition as an indicator of which compliance/enforcement approach applies. In other words, it is not the drafting team's expectation that the operator must differentiate between Emergency and non-Emergency Operating Instructions."  Measure M4 requires compliance demonstration beyond Requirement R4. Specifically, entities must provide evidence that appropriate corrective action was taken for all instances where an operating personnel's non-adherence to the protocols developed in Requirement R1 is the sole or partial cause of an Emergency.
		Response: The OPCP SDT has adjusted the language of Measure M4 to better align with the language in Requirement R4.
		The format of the standard should be changed to conform to the current NERC direction-the measures get listed with the associated requirement, and the rationale get included in the standard, not a separate document.
NERC Standards Review Forum	Yes	1. Per section one of this document, the OPCP SDT states: The Project 2007-02 OPCP SDT removed the term "Reliability Directive" in order to avoid complications that may result from the Notice of Proposed Rulemaking issued by the Federal Energy Regulatory Commission on November 21, 2013 proposing to remand the definition of "Reliability Directive." But within the latest Implementation Plan, there still is the prerequisite of approving the term "Reliability Directive". Please update whichever documentation that should be corrected in order to provide the



Organization	Yes or No	Question 4 Comment
		industry with accurate information so that we can determine if this Standard supports the reliability of the BES.
		Response: The OPCP SDT thanks you for your comment. However the clean version of the Implementation Plan does not contain the words "Reliability Directive." The words do appear in the redline to the last posted version in strikethrough.
Colorado Springs Utilities	Yes	Comments: 1. R1.4 [Documented communications protocols for its operating personnel that issue and receive Operating Instructions shall, at a minimum] Require its operating personnel that issue a written or oral single-party to multiple-party burst Operating Instruction to confirm or verify that the Operating Instruction was received by at least one receiver of the Operating Instruction. o Some ISO's issues multiple-party burst Operating Instruction to Generator Operators through electronic means. Associated real-time requirement: R7. Each Balancing Authority, Reliability Coordinator, and Transmission Operator that issues a written or oral single-party to multiple-party burst Operating Instruction during an Emergency shall confirm or verify that the Operating Instruction was received by at least one receiver of the Operating Instruction. Comment: The SRC does not believe this requirement is necessary for reliability. Moreover, the Standard Drafting Team has not provided any, nor have we been made aware of the substantiated rationale for keeping this Requirement except that the OPCP SDT believes is it necessary.
		Response: The OPCP SDT asserts that it is important that the issuer of a written or oral single-party to multiple-party burst Operating Instruction makes sure that the communication channel was complete. This can be accomplished by confirming with at least one party that the communication was received.
		2. R1.6 [Documented communications protocols for its operating personnel that issue and receive Operating Instructions shall, at a minimum] Specify the nomenclature for Transmission interface Elements and Transmission interface



Organization	Yes or No	Question 4 Comment
		Facilities when issuing an oral or written Operating Instruction. Comment: This requirement is vague and needs to be clarified for Registered Entities to know how to comply with it; how would one "specify nomenclature" system-wide? Comment: This requirement was dropped from TOP-002-2a, requirement 18. Communication on transmission equipment must be equipment specific. Nomenclature should not be used, rather entities should always be correctly communicating using the unique and specific equipment identifiers. Adding nomenclature will reduce not improve reliability.
		Response: Please see the summary response to Question 1.
		3. R2. and R3"shall conduct initial training for each of its operating personnel"Comment: The SRC does not believe a training Requirement is necessary; Responsible Entities must adhere to the Requirements of NERC Standards and how they accomplish this should not be dictated by a Standard Requirement. Under RAI principles, NERC and Regions can determine what type of monitoring is appropriate of Responsible Entities' compliance with the new COM Standard based on the quality of their Training programs. This would further support reliability by changing the requirement from a one-time audit (i.e., initial training) to an ongoing assessment.
		Response: Please see the summary response to Question 1.
	,	
Florida Municipal Power Agency	Yes	FMPA is voting "affirmative" on this standard, yet we have concerns with the RSAW language and lack of criteria on how an entity will be assessed and audited. There is language in the RSAW "Notes to Auditor" for multiple requirements (R4-R7) that is of concern. (See example below) The RSAW language is not clear regarding the nature and extent of audit procedures that will be applied because there is reference to scoping the audit based on "certain risk factors to the Bulk Electric System". It is not clear what "risk factors" will be used. As an example in R5 auditing "can range from exclusion of a requirement from audit scope to the auditor reviewing, in accordance



Organization	Yes or No	Question 4 Comment
		with the above Compliance Assessment Approach, evidence associated with the entity's responses to numerous Operating Instructions issued during Emergencies." This is essentially a zero tolerance approach, yet, also appears to be an attempt to apply Reliability Assurance Initiative (RAI) concepts, that have not been finalized and communicated to the industry. It is uncertain whether these concepts have been fully developed yet; and therefore, this leaves too much auditor discretion, without providing the industry information or criteria on how "risk" will be assessed. Stakeholders continue to await the details of these RAI concepts that are being utilize in RSAWS. Clarity is needed around how an entity's risk to the BES will be assessed duto compliance or non-compliance with this standard. This would also beneficial for an entity to know, so that they can lessen that risk, as appropriate. Example language from RSAW: "The extent of audit procedures applied related to this requirement will vary depending on certain risk factors to the Bulk Electric System. In general, more extensive audit procedures will be applied where risks to the Bulk Electric System are determined by the auditor to be higher for non-compliance with this requirement. Based on the auditor's assessment of risk, as described above, specific audit procedures applied for this requirement may range from exclusion of this requirement from audit scope to the auditor reviewing, in accordance with the above Compliance Assessment Approach, evidence associated with the entity's responses to numerous Operating Instructions issued during Emergencies. "
		Response: The OPCP SDT thanks you for your comments. We will convey the RSAW comments to the RSAW drafting team. For more information about the NERC RAI program, please refer to the February 5, 2014 agenda for the Board of Trustees Compliance Committee. An update on RAI was provided. In addition, information about RAI may be found here: <a href="http://www.nerc.com/pa/comp/Pages/Reliability-Assurance-Initiative.aspx">http://www.nerc.com/pa/comp/Pages/Reliability-Assurance-Initiative.aspx</a> .



Organization	Yes or No	Question 4 Comment
PPL NERC Registered Affiliates	Affiliates	These comments are submitted on behalf of the following PPL NERC Registered Affiliates: Louisville Gas and Electric Company and Kentucky Utilities Company; PPL EnergyPlus, LLC; PPL Electric Utilities Corporation; and PPL Generation, LLC, on behalf of its NERC registered entities. The PPL NERC Registered Affiliates are registered in six regions (MRO, NPCC, RFC, SERC, SPP, and WECC) for one or more of the following NERC functions: BA, DP, GO, GOP, IA, LSE, PA, PSE, RP, TO, TOP, TP, and TSP.
		Each of the PPL NERC Registered Affiliates recognize the need for and support the use of three part communications for Operating Instructions. However, we are abstaining from voting on this standard because we believe that the current version of COM-002-4 requires change to ensure consistency with the OPCP SDT's intent. If these clarifications are made, the PPL NERC Registered Affiliates would support the proposed standard.
		First, the PPL NERC Registered Affiliates request that the OPCP SDT revise Measure M.4 to specifically state that sampling is allowed in performing the assessments required by Requirements R.4.1 and R.4.2. This is consistent with the OPCP SDT's oral statements during the January 17, 2014 webinar and the FAQ ("An entity could perform an assessment by listening to random samplings of each of their operating personnel issuing and/or receiving Operating Instructions"). Additionally, for consistency and to avoid ambiguity, the OPCP SDT should also conform the wording in Measure M.4 to Measures M.5-M.7 (i.e., "Such evidence may include, but is not limited to,"). Therefore, we recommend that the OPCP SDT revise Measure M.4 as follows: M4. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide evidence of its assessments. Such evidence may include, but is not limited to, sampling results, spreadsheets, logs or other evidence of feedback, findings of effectiveness and any changes made to its documented communications protocols developed for Requirement R1 in fulfillment of Requirement R4
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "An entity could perform an assessment by listening to random samplings of each of their operating personnel



Organization	Yes or No	Question 4 Comment
		issuing and/or receiving Operating Instructions. If there were instances where an Operator deviated from the entity's protocols, the entity would provide feedback to the operator in question in any method it sees as appropriate. An example would be counseling or retraining the operator on the protocols.
		An entity could assess the effectiveness of its protocols by reviewing instances where operators deviated from those protocols and determining if whether the deviations were caused by operator error or by flaws in the protocols that need to be changed." The OPCP SDT asserts that this, in conjunction with the RSAW, provides sufficient clarity.
		Second, the PPL NERC Registered Affiliates request that the OPCP SDT clarify in the proposed standard that only a failure to use three-part communications during an Emergency is a violation of COM-002-4. Therefore, we recommend that the standard's requirements be further revised to indicate that if an entity does not adhere to its documented communications protocols developed in accordance with Requirement R.1 during a non-Emergency, such action shall not be considered a noncompliance event under Requirement R.1.
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "The standard uses the phrase 'Operating Instruction during an Emergency' in certain Requirements (R5, R6, and R7) to provide a demarcation for what is subject to a 'zero tolerance' compliance/enforcement approach and what is not. This is necessary to allow the creation of Violation Severity Levels for each compliance/enforcement approach. Where 'Operating Instruction during an Emergency' is not used, an entity will be assessed under a compliance/enforcement approach that focuses on whether or not an entity met the initial training Requirement (either R2 or R3) and whether or not an entity performed the assessment and took corrective action according to Requirement R4. The proposed COM-002-4 does not contain a Requirement to adhere to all documented communications protocols during non-Emergency conditions. Under COM-002-4, the assessment and training documentation will



Organization	Yes or No	Question 4 Comment
		provide auditors assurance that responsible entities are using their documented communications protocols and taking corrective actions as necessary."
	1	
Duke Energy	Yes	(1)Duke Energy suggests rewording R1.6 as follows: "Specify the nomenclature to be used for Transmission interface Elements and Transmission interface Facilities when issuing an oral or written Operating Instruction to neighboring entities." While the Technical Justification document suggests that R1.6 applies to communication with neighboring entities, it is unclear that this requirement, as worded in the current draft of COM-002-4, is specifically discussing communication with neighboring entities.
		Response: The OPCP SDT asserts that the existing language provides sufficient clarity.
		(2)M2 should include "initial training" and be reworded as follows in order to maintai consistency with the requirement: "Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide initial training records related to its documented communications protocols developed for Requirement R1 such as attendance logs, agendas, learning objectives, or course materials in fulfillment of Requirement R2."
		Response: The OPCP SDT considered your suggestion and made non-substantive clarifying changes to the wording of Measure M2.



Organization	Yes or No	Question 4 Comment
SPP Standards Review Group	Yes	The removal of Reliability Directive from the definition of Operating Instruction has removed clarity from a compliance viewpoint. Without this clarity, which could also be provided by requiring a statement which identifies the Emergency situation as an Emergency, the operator does not know that he is in an Emergency situation. Although the operator's response may be the same as it is in a non-emergency, the compliance hook of zero tolerance is there. We need a mechanism in place that we can use to identify when we are in an Emergency situation which prevents Monday-morning quarterbacking during an audit regarding whether an Emergency actually occurred or not. Reliability Directive gave us that indication. We recommend requiring an Operating Instruction that is issued during an Emergency situation be identified as 'This is an Emergency.'
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "Separately listing out Requirements R5, R6, and R7 and using 'Operating Instruction during an Emergency' in them does not require a different set of protocols to be used during Emergencies or mandate the identification of a communication as an 'Operating Instruction during an Emergency.' The same protocols are required to be used in connection with the issuance of Operating Instructions for all operating conditions. Their use is measured for compliance/enforcement differently using the operating condition as an indicator of which compliance/enforcement approach applies. In other words, it is not the drafting team's expectation that the operator must differentiate between Emergency and non-Emergency Operating Instructions."
		Additionally, since an entity will be required to file a Reportable Event for damage or destruction of a Facility (damage or destruction of a Facility within its Reliability Coordinator Area, Balancing Authority Area, or Transmission Operator Area that results in actions to avoid a BES Emergency), BES Emergency requiring public appeal for load reduction, BES Emergency requiring system-wide voltage reduction, BES Emergency requiring manual firm load shedding, and BES Emergency resulting in



Organization	Yes or No	Question 4 Comment
		automatic firm load shedding per EOP-004-2, entities will be aware of the Emergency.
		Recommendation 26 calls for work to be done to improve the effectiveness of communications in emergency situations. The purpose of the standard is to improve communications. However, the focus of the standard is primarily 3-part communications. There is no supporting documentation or data to support the position that 3-part communications improves the effectiveness of communications. Focusing on 3-part communications provides an easy target from a compliance perspective but all it teaches us is to mechanically repeat back what we have been instructed to do. We're focusing on the 'how' and 'what' rather than the 'why'. Keeping the 'why' in mind improves communications and the reliability of the BES. Keeping the 'why' in mind also leads to improved situational awareness. Improving effective communications is difficult to quantify in a standard and even more difficult to measure. We may be better off focusing on the principles contained in the OC's Reliability Guideline System Operator Verbal Communications - Current Industry Practices.
		Response: The OPCP SDT thanks you for your comment.
		We suggest that R2 and R3 are already provided for in PER-005 and therefore are redundant in this standard. If there is a need to include a training requirement in this standard, that requirement could consist of a statement to include protocol training in the entity's reliability task list.
		Response: Please see the summary response for Question 1.
		Measure 4 adds an additional requirement regarding the failure to follow protocols which in turn leads to an Emergency. The Measure basically requires the responsible entity to assess those particular situations even though they are not specifically called out in the requirement. We recommend adding the following sentence at the end of R4.1: 'Such assessment shall include, at a minimum, any instance that is an Emergency.'



Organization	Yes or No	Question 4 Comment
		Response: The OPCP SDT considered the suggested edits. The OPCP SDT chose to revise Measure M4 to better align with the language in Requirement R4.
		We recommend that the drafting team consider moving R4 back to language similar to that contained in R5 of Posting 7. This language is much clearer and eliminates Paragraph 81 concerns of administrative burden associated with the required 12-month assessments and removes the ambiguity of 'corrective actions' and 'as appropriate'.
		In the last line of the Evidence Requested table in the R2 section of the RSAW, the following evidence is requested: 'Organization chart or similar artifact identifying the operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System and the date such personnel began operating the Real-time Bulk Electric System.' This implies that an entity will be found non-compliant if operating personnel operate the Real-time BES prior to receiving training on issuing Operating Instructions. This is not what is stated in the requirement. This entry should be reworded to the following: 'Organization chart or similar artifact identifying the operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System and the date such personnel began issuing Operating Instructions.' Similarly, this change needs to be made in the Compliance Assessment Approach Specific to COM-002-4, R2 table. That entry should read: 'Verify applicable operating personnel, or a sample thereof, received the required training prior to the date they began issuing Operating Instructions by agreeing selected personnel names to training records.'
		Response: The OPCP SDT has provided your comments to the RSAW team.
Bureau of Reclamation	Yes	Reclamation requests that R5 include a bullet requiring the issuer of an Operating Instruction during an Emergency to identify the situation as an Emergency. This is important because R6 requires recipients of Operating Instructions to repeat the



Organization	Yes or No	Question 4 Comment
		instructions during Emergencies, but it may not be clear to the recipient that an Emergency is occurring.
		Response: Please see the summary response for Question 1.
		Reclamation reiterates that R1.3 and R3 should also allow the receiver of an Operating Instruction to respond by explaining that a requested action cannot be performed (e.g., due to safety, equipment, regulatory, or statutory requirements as described in TOP-001 R3 and IRO-001 R8). The requirement to either repeat or request that the instruction be reissued does not account for the realistic situation that an entity may not be able to perform an Operating Instruction. The drafting team could choose to address this point with a footnote explaining that the requirement to repeat the instruction does not obligate the recipient to perform the action if he repeats the instruction, but then explains that he cannot perform the action because doing so would violate safety, equipment, regulatory, or statutory requirements.
		Response: Requirement R1 only describes what should be covered in an entity's documented communication protocols. Requirement R3 only includes the bullets to identify what an operator must be trained to do. Therefore, what action an entity may take is not relevant for these requirements—actions are addressed by other standards (e.g. IRO-001 and TOP-001). However, to address the concern, it is important that the issuer and receiver understand the Operating Instruction prior to determining whether the action can or cannot be completed.
Dominion	Yes	The proposed standard still contains requirements that mandate the use of, and training to include, 3 part communications during issuance of all Operating Instructions, including those issued during non-Emergency situations. While Dominion agrees that the OPCP SDT has stated in its Rationale and Technical Justification document that the proposed measures and RSAW don't specifically require that auditors verify compliance of this for the requirements (and associated measures), a



Organization	Yes or No	Question 4 Comment
		strict read leads us to a different conclusion. Under the RSAW for R1 it states that the entity shall provide its documented communications protocols developed for this requirement and the auditor shall review the documented communications protocols provided by entity and ensure they address the Parts of R1 (including the use of 3 part communications). The RSAW contains similar actions relative to R2 and R3 in that the entity is to provide evidence consisting of agendas, learning objectives, or course materials that it provides pursuant to these requirements. Given this, Dominion believes an auditor can enforce to a 'zero defect tolerance' if it chooses to do so and in fact would argue that an audit would be deficient if it failed to validate whether the learning objective included insuring that 3 part communication was used during issuance or receipt of each Operating Instruction.
		Response: The OPCP SDT disagrees. Requirement R1 is limited to what protocols must be included in the documented protocols of an entity. Requirements R2 and R3 require training. Requirement R4 requires an assessment of the use of the protocols.
		Dominion also finds there are not clear and concise differences between requirements 1, 5 and 6 resulting in uncertainty as to whether the Operating Instruction is being issued to alleviate or avoid an Emergency. Dominion is concerned that, absent a requirement that the issuer make a definitive statement as to whether an Operating Instruction is being issued to alleviate or avoid an Emergency, neither the recipient (during) nor an auditor (after) would be able to make such determination. Having said this, we could support the standard if it were revised in a fashion similar to that described below. 1. Modify requirement 1 so that it applies to all Operating Instructions but requires that those being issued to alleviate or avoid an Emergency be specifically identified as such and that the issuer explicitly request recipient confirm their understanding through use of 3 part communication.
		Response: The OPCP SDT reiterates that Requirement R1 only concerns what protocols must be included in the documented protocols. The drafting team



Organization	Yes or No	Question 4 Comment
		believes that there is sufficient clarity among Requirements R1, R5, and R6 on the performance required.
		2. Remove requirements 5, 6 & 7 (incorporating specific items deemed necessary by the OPCP SDT as bullets or sub-requirements of R1).
		Response: Please refer to prior response.
		3. Revise measures, VRFs/VSLs and RSAW so that strict compliance with use of 3 part communication is only applied when an Operating Instruction is issued to alleviate or avoid an Emergency as identified by the issuer at the time of issuance.
		Response: Please refer to prior response.
		4. Measure M4 requires compliance demonstration beyond Requirement R4. Specifically, entities must provide evidence that appropriate corrective action was taken for all instances where an operating personnel's non-adherence to the protocols developed in Requirement R1 is the sole or partial cause of an Emergency,
		Response: The OPCP SDT has modified the language in Measure M4 to better align with the language in Requirement R4.
		Examples of suggested changesR1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall develop documented communications protocols for its operating personnel that issue and receive Operating Instructions. The protocols shall, at a minimum: [Violation Risk Factor: Low][Time Horizon: Long-term Planning]1.1. Require that its operating personnel identify, at the time of issuance, when the Operating Instruction is being issued to alleviate or avoid an Emergency 1.2. Require its operating personnel that issue an oral two-party, person-to-person Operating Instruction to take one of the following actions: o Confirm the receiver's response if the repeated information is correct. o Reissue the Operating Instruction if the repeated information is incorrect or if requested by the receiver. o Take an alternative action if a response is not received or if the Operating Instruction was not
		understood by the receiver. o Request recipient use 3 part communication when the Operating Instruction is being issued to alleviate or avoid an Emergency 1.3 Require its



Organization	Yes or No	Question 4 Comment
		operating personnel that issue and receive an oral or written Operating Instruction to use the English language, unless agreed to otherwise. An alternate language may be used for internal operations.1.4. Require its operating personnel that issue a written or oral single-party to multiple-party burst Operating Instruction to confirm or verify that the Operating Instruction was received by at least one receiver of the Operating Instruction.1.5. Specify the instances that require time identification when issuing an oral or written Operating Instruction and the format for that time identification.1.6. Specify the nomenclature for Transmission interface Elements and Transmission interface Facilities when issuing an oral or written Operating Instruction.M1. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide its documented communications protocols developed for Requirement R1. For each Operating Instruction issued to alleviate or avoid an Emergency; entity shall provide evidence that it identified such at time Operating instruction was issued (R1.1) and requested recipient use of 3 part communication (R1.2). o VSL for R1 - modify Severe to include any instance where entity either (1) failed to identify, at the time of issuance, that the Operating Instruction is being issued to alleviate or avoid an Emergency or (2) failed to request recipient use 3 part communication when the Operating Instruction was issued to alleviate or avoid an Emergency
ACES Standards Collaborators	Yes	(1) We disagree with training requirements as they are redundant with PER-005. Similar to a FERC directive, the drafting team should be able to provide the BOT with technical justification that other alternatives exist to developing a new requirement such as pointing to an existing requirement. Training is already included in the PER requirements. The drafting team should provide the feedback from industry and show that there is an already existing enforceable standard that covers this issue of training and there are no gaps in reliability.  Response: Please see the summary response to Question 1.



Organization	Yes or No	Question 4 Comment
		(2) We do not think the Distribution Provider should be an applicable function. Most Distribution Providers simply do not have a materially impact on BES reliability. We suggest an alternative to have the standard apply to those DP that may impact the BES. According to the FERC-approved CIP version 5 standards, a Distribution Provider is subject to the standards if the DP has UFLS/UVLS systems that have the capability of shedding 300 MW or more of load. We ask the drafting team to consider revising the applicability section to mirror the CIP standards. There was technical justification provided during the development of those standards, NERC and FERC both approved those standards, and therefore, a precedent exists for this reasonable approach to focusing on entities that pose an impact, however minimal, to the BES.
		Response: Please see the summary response to Question 1.
		(3) Many DPs have no practical way to demonstrate compliance with "repeat backs." Many DPs do not have recording systems for the telephonic communications. This puts the DP in a position to request the voice recordings or attestations from the issuer. The issuer is not obligated to provide the data and, in fact, history has shown that many registered entities will not provide this type of data to a third party for fear of compliance issues being identified with the issuer. Thus, from a practical perspective the standard puts the DP in the position of having to use weak evidence to demonstrate compliance. This is an unreasonable burden on the DP.
		(4) We recommend that the drafting team remove references to "taking alternative actions." This is ambiguous and could potentially tie in actions that should be taken in accordance to directives in IRO-001 and TOP-001. COM-002 is related only to communications, so taking alternative actions must be limited to alternative communications.
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "If an operator issues an Operating Instruction during an Emergency and, based on the response from the receiver, or lack thereof, chooses to take an alternative action, that operator has satisfied Requirement R5 and is not in violation.



Organization	Yes or No	Question 4 Comment
		<ul> <li>The following scenario is provided as an example of an alternative action:</li> <li>A Transmission Operator (TOP) calls a Generator Operator (GOP) to reduce generation due to an Emergency. The GOP does not respond verbally. At that point the TOP could: <ul> <li>Ask if the GOP understood the Operating Instruction (alternative action).</li> <li>Hang up and redial the GOP, assuming that the communication line was dead (alternative action),</li> <li>Request a different generator that is effective to reduce (alternative action); or</li> <li>Call a different contact at the GOP (alternative action)."</li> </ul> </li> </ul>
		(5) We suggest that the "assess adherence and assess effectiveness" language in R4 be removed from COM-002-4. This language is similar to the "Identify, Assess and Correct (IAC)" language that was included in the CIP V5 standards. The removal or modification of this language was included in the Final Rule on NERC CIP V5 Standards (Order No. 791). FERC stated that IAC language and concepts would be best addressed in the NERC compliance processes, such as through the NERC Reliability Assurance Initiative (RAI), rather than standards requirements.
		Response: Please see the summary response to Question 1.
		(6) Thank you for the opportunity to comment.
ISO/RTO Council Standards Review Committee	Yes	1. R1.4 [Documented communications protocols for its operating personnel that issue and receive Operating Instructions shall, at a minimum] Require its operating personnel that issue a written or oral single-party to multiple-party burst Operating Instruction to confirm or verify that the Operating Instruction was received by at least one receiver of the Operating Instruction. o Some ISO's issues multiple-party burst Operating Instruction to Generator Operators through electronic means Associated real-time requirement: R7. Each Balancing Authority, Reliability Coordinator, and Transmission Operator that issues a written or oral single-party to multiple-party burst Operating Instruction during an Emergency shall confirm or verify that the Operating



Organization	Yes or No	Question 4 Comment
		Instruction was received by at least one receiver of the Operating Instruction. NOTE - ERCOT does not support the following Comment: The SRC members (excluding ERCOT) do not believe this requirement is necessary for reliability. Moreover, the Standard Drafting Team has not provided any, nor have we been made aware of the substantiated rationale for keeping this Requirement except that the OPCP SDT believes is it necessary.
		Response: The OPCP SDT asserts that it is important that the issuer of a written or oral single-party to multiple-party burst Operating Instruction makes sure that the communication channel was complete. This can be accomplished by confirming with at least one party that the communication was received.
		2. R1.6 [Documented communications protocols for its operating personnel that issue and receive Operating Instructions shall, at a minimum] Specify the nomenclature for Transmission interface Elements and Transmission interface Facilities when issuing an oral or written Operating Instruction.Comment: This Requirement is vague and needs to be clarified for Registered Entities to know how to comply with it; how would one "specify nomenclature" system-wide? Even though the posted "Rationale and Technical Justification" (RTJ) document notes that R1.6 is limited in scope to only Transmission interface Elements or Transmission interface Facilities (e.g. tie lines and tie substations), this RTJ document should define these terms and substantiate to what registered entities this needs to apply. For example, if the intent is to apply this requirement to Inter-Area tie-lines, then it should probably be limited to Reliability Coordinator-to-Reliability Coordinator communications. If the intent is to apply this requirement to every type of transmission - say generation interconnection facilities - it should be clear so that Registered Entities can clearly understand the burdens associated with this new Requirement.  Response: Please see the summary response to Question 1.
		3. R2. and R3"shall conduct initial training for each of its operating personnel"Note - ERCOT and IESO do not support the following Comment: The SRC members, (excluding ERCOT and IESO) do not believe a training Requirement is necessary;



Organization	Yes or No	Question 4 Comment
		Responsible Entities must adhere to the Requirements of NERC Standards and how they accomplish this should not be dictated by a Standard Requirement. Additionally, to the extent that the OPCP SDT concludes that training on 3-part communication is necessary to ensure an adequate level of reliability, then any training requirements should this would already be covered under the PER Standard, which requiresing training on job tasks. To the extent training requirements should be imposed on GOP/DP personnel, the PER Standard could be slightly modified to include them. Overall, if NERC is going to add additional training requirements, they should be located in PER to avoid complexity in the organization of NERC Standards. Finally, under RAI principles, NERC and Regions can determine what type of monitoring is appropriate of Responsible Entities' compliance with the new COM Standard based on the quality of their Training programs. This would further support reliability by changing the requirement from a one-time audit (i.e., initial training) to an ongoing assessment. In conclusion, even though the BOT resolved that there should be training associated with the COM requirements, it would be beneficial to address the BOT's concern through existing Standards (PER). Basic principles of drafting regulation should strive to avoid making the organization and relationship among NERC Standards more complex than need to be.
		Response: Please see the summary response to Question 1.
		4. Measurement 6. Meaurement 6 needs to be revised so that it is consistent with NERC Enforcement policies. Specifically, the last sentence needs to be rewritten so that "Such evidence may include, but is not limited to, dated and time-stamped voice recordings[,] dated operator logs, an attestation from the issuer of the Operating Instruction, voice recordings (if the entity has such recordings), memos and transcripts." NERC has repeatedly affirmed that a Registered Entity may provide an attestation that it has complied with a Standard. See NERC Compliance Process Bulletin#2011-001 ("Data Retention Requirements") (May 20, 2011), at p 3 (in the context of explaining that the CMEP requires a registered entity to demonstrate that it was compliant through the entire audit period, NERC stated that some examples of evidence may include "An attestation of any employee who has participated in the



Organization	Yes or No	Question 4 Comment
		activity on a regular basis throughout the audit period, supported by other corroborating evidence (such as schedules, emails and other applicable documentation). Recipients of oral Operating Instructions during an Emergency have ample means of maintaining records, providing corroborating material, etc demonstrating that they adhered to the emergency Operating Instruction. To establish an expectation that other Registered Entities may be maintaining audit evidence for the Registered Entity to which the Requirement applies is inconsistent with NERC's enforcement rules and establishes a flawed practice and expectation with regard to recordkeeping requirements and "audit trails."
		Response: The list of examples of evidence is not exhaustive. The measure simply provides examples.
Luminant	Yes	1). R1.3 and R3 should also allow the receiver of an Operating Instruction to respond by explaining that a requested action cannot be performed (e.g., due to safety, equipment, regulatory, or statutory requirements as described in TOP-001 R3 and IRO-001 R8). The requirement to either repeat or request that the instruction be reissued does not account for the realistic situation that an entity may not be able to perform an Operating Instruction.
		Response: Please see the summary response to Question 1.
		2). Specific to R.6, consideration should be given to revise the verbiage from, "during an Emergency" to "identified by the sender as constituting an Emergency directive." The rational for the recommendation is offered to provide clarity to the Requirement, as it is anticipated that there will be cases when it is not clear the Operating Instruction is associated with an Emergency. Additionally, the definition of "Emergency" in the NERC Glossary is broad and consequently it may be difficult, at
		times, to determine which inputs are subject to COM-002-4 requirements, especially if the TO or TOP calls a plant operator directly rather than going through the respective



Organization	Yes or No	Question 4 Comment
		dispatchers.Note: On the 1/17/14 COM-002-4 OPCP SDT webinar the question was asked, how a DP or GOP would know that an Operating Instruction occurred during an Emergency. The drafting team stated that after every Operating Instruction the DP should call its TOP to determine if the Operating Instruction occurred during and Emergency. Luminant once again reiterates that it would be more efficient and the industry would benefit as a whole, if the sender of the Operational Instruction, states the instruction is associated with an Emergency.
		Response: Please see the summary response to Question 1.
		As a clarifier, the OPCP SDT provided the response during the webinar that, if a receiver was unsure whether there was an Emergency or not, the receiver could ask the issuer for clarification.
Public Utility District No.1 of Snohomish County	Yes	While the Public Utility District No.1 of Snohomish County supports this draft of COM-002-4, we see an issue with R2 and R3 of this standard. These requirements both deal with entities conducting training for its personnel, and feel it would be more appropriate if they were addressed in the PER family of standards. The Public Utility District No.1 of Snohomish County also supports the comments submitted by the SERC OC Review Group. Thank you very much.
		Response: Please see the summary response to Question 1.
The United Illuminating Company	Yes	PER-005-2 introduced the concept of a Transmission Owner local control center that issues and receives instructions independent of a TOP, RC or BA. COM-002-4 should apply to Transmission Owners.
		Response: The OPCP SDT thanks you for your comment. Please refer to question 9 in the FAQ document posted on the project page for a response to your comment.



Organization	Yes or No	Question 4 Comment
Liberty Electric Power LLC	Yes	COM-002 remains a zero defect standard, and there is no FERC directive to provide a zero defect standard in response to either blackout recommendation 26 or Paragraph 535 of Order 693. Further, there is no requirement for the issuer of an Operating Instruction in an Emergency to indicate the Emergency status. The webinar response to queries over the lack of Emergency Status Indication was to suggest the RE "call and inquire" if the OI was in fact a Directive. This adds to the regulatory burden while offering zero benefit. Identification of an Emergency has positive effects far beyond three part communications. The realization of risk to the BES should create a heightened sense of urgency among all parties. The standard must require announcement of Emergency status in order to penalize RE's for actions which are not violations in a non-Emergency situation.
		Response: Please see the summary response to Question 1.
		As a clarifier, the OPCP SDT provided the response during the webinar that, if a receiver was unsure whether there was an Emergency or not, the receiver could ask the issuer for clarification.
	ı	
Wisconsin Electric Power Company	Yes	The proscribed training requirements embedded in R2 and R3 should be removed. The existence and usage of protocols should be the primary focus of the standard and regulatory review, creating a training requirement within the standard shifts focus to training content and administration. Additionally, PER-005-1 requires the Balancing Authority, Reliability Coordinator, and Transmission Operator to have a systematic approach to training (SAT). The adoption and management of a SAT would presumably include communications protocols as a task for potential training. The current draft version of PER-005-2 includes a similar requirement for a SAT applicable to the Generator Operator.



Organization	Yes or No	Question 4 Comment
		Response: Please see the summary response to Question 1.
		The annual assessment and corrective action process defined in R4 should be made applicable to Operating Instructions during an Emergency. Although the NERC Glossary of terms provides a definition of Emergency, two reasonable people looking at a situation can disagree as to when an Operating Instruction is issued during an Emergency. Creating a zero defect standard applicable to inherently ambiguous situations shifts focus from the adoption of communication protocols to discussion of when an Operating Instruction is issued during an Emergency. During an entities annual assessment process, the focus would be on classification of an Emergency instead of process improvement for communications. An alternate approach would be to draft the standard so as to require the explicit identification of an Operating Instruction and/or Emergencies so as to remove the ambiguity.
		Response: Please see the summary response to Question 1.
		Finally, the definition of Operating Instruction references a command issued by operating personnel, without sufficiently defining operating personnel.
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity. The requirements in the standard define which operating personnel are applicable to the standard.
NRECA	Yes	NRECA suggests that the "assess adherence and assess effectiveness" language in R4 be removed from COM-002-4. This language is similar to the "Identify, Assess and Correct (IAC)" language that was included in the CIP V5 standards. The removal or modification of this language was included in the Final Rule on NERC CIP V5 Standards (Order No. 791). FERC stated that IAC language and concepts would be best addressed in the NERC compliance processes, such as through the NERC Reliability Assurance Initiative (RAI), rather than standards requirements.



Organization	Yes or No	Question 4 Comment
		Response: Please see the summary response to Question 1.
Ingleside Cogeneration LP	Yes	ICLP would like to see the innovative approach that the drafting team used to develop COM-002-4 applied to other standards as well. The issue that continues to arise is not so much whether mandatory requirements are based upon sound reliability principles, but how they can be reasonably enforced. In this case, it is clear that many entities do not have the tools or resources to examine every Operating Instruction in detail in order to assure 100% compliance with a rigorous communication protocol. Conversely, training and retention programs are common - and have proven to be an effective means to drive consistent Operator performance.  Response: The OPCP SDT thanks you for your comment.
Clark Public Utilities	Yes	For the purposes of Requirements 5 and 6, Clark believes it should be an obligation of the issuer of Operating Instruction given during an emergency to identify it as an Emergency Operating Instruction. It should not an obligation of the reciever to determine after-the-fact whether an Operating Instruction is an Emergency or not. All Operating Instructions issued by a BA, RC, or TOP should be regarded with importance but a specification by the issuer that the instruction is in response to an Emergency will alert the receiver that a particular Operating Instruction action requirement has a role in the overall reliability of the BES resulting in a higher level of BES reliability.
		Response: Please see the summary response to Question 1.
Manitoba Hydro	Yes	1) The protocols at minimum should require full name identification.



Organization	Yes or No	Question 4 Comment
		Response: The OPCP SDT considered your suggestion but asserts that the requirement for "full name identification" does not need to be a mandated communication protocol.
		2) R2 - the description of the applicable operating personnel (i.e. that are responsible for Real-Time operation of the interconnected BES) is different in this part than others (that state it's for operating personnel that issue and receive certain Operating Instructions). Is that purposeful?
		Response: The OPCP SDT chose that language in Requirement R2 to designate what personnel must be trained.
		3) R5, R6, R7 and R8 - the numbering seems to be mixed up.
		Response: The OPCP SDT is not sure to what you are referring. The standard has no Requirement R8.
		4) M2 and M3 - are not drafted consistently given the consistency in drafting of requirements R2 and R3. M3 refers to 'its initial' training records while M2 does not and M3 refers to training records 'for its operating personnel' while M2 does not.
		Response: The OPCP SDT considered your suggestion and made non-substantive clarifying changes to the wording of Measure M2.
		5) M4 - contains a section of text that is not reflective of the requirement itself and has no basis for appearing in the measure. The requirement states only that the entity need only take corrective action to address deviations. The extra text that discusses instances where non adherence is the sole or partial cause of an Emergency should be deleted.
		Response: The OPCP SDT clarified the language in Measure M4 to better align with the language in Requirement R4.
		6) M6, M7 - the words 'if the entity has such recordings' seem unnecessary. This qualifying language isn't attached to any other type of evidence that is listed as a



Organization	Yes or No	Question 4 Comment
		possibility; presumably all of those are subject to the same qualifier and would only be presented as evidence if the entity had them.
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
Georgia Transmission Yes Corporation	Comments: GTC suggests that the "assess adherence and assess effectiveness" language in R4 be removed from COM-002-4. This language is similar to the "Identify, Assess and Correct (IAC)" language that was included in the CIP V5 standards which FERC directed the removal of. The removal or modification of this language was included in the Final Rule of NERC CIP V5 (Order No. 791). FERC stated that IAC language was "overly-vague, lacking definition and guidance is needed" and that these control concepts would be best addressed in the NERC compliance processes, such as through the NERC Reliability Assurance Initiative (RAI), rather than standards requirements.	
		Response: Please see the summary response to Question 1.
		Lastly, GTC recommends a revision to the NERC Glossary term Emergency. GTC recommends the removal of the terms "or limit" within this definition. One could argue that every single Operating Instruction is utilized to limit failures of transmission facilities. Emergency should be more appropriately defined without this ambiguity:Proposed:Emergency or BES Emergency: Any abnormal system condition that requires automatic or immediate manual action to prevent the failure of transmission facilities or generation supply that could adversely affect the reliability of the Bulk Electric System.
		Response: The OPCP SDT considered your suggestion but asserts that the existing definition of Emergency provides sufficient clarity.



Organization	Yes or No	Question 4 Comment
American Transmission Company, LLC	Yes	ATC recommends changing the language in Requirement 4 to read as follows:" Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall at least once every calendar year, and no more than every 15 months: "This would be consistent with the NERC's annual requirement assessment made in NERC's Compliance Application Notice (CAN)- 0010 issued on November16, 2011. In doing so, it should drive consistency among the CEA on how it is enforced.
		Response: The OPCP SDT thanks you for your comments. The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
	'	
Independent Electricity System Operator	Yes	Recently, FERC directed NERC to eliminate the ambiguity with language "identify, assess, and correct" deficiencies for the CIP standards. Although it supported NERC's move away from a "zero tolerance" approach to compliance, FERC wanted NERC provide more guidance regarding enforceability with the self-identify/assess/correct approach to compliance. NERC may want to consider that FERC may raise the same concerns with this proposed standard.
		Response: Please see the summary response to Question 1.
		According to the draft standard, if DPs and GOPs receive an Operating Instruction, they can provide an attestation from the issuer of the Operating Instruction to demonstrate compliance - they do not need to develop documented communications protocols. The lighter compliance burden on DPs and GOPs may result in a higher administrative burden for the RC/BA/TOP to provide attestations.
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "The Measures provide various options that the drafting team considered as ways to demonstrate compliance for Requirement R6. It is not an exhaustive list, and in no way places an expectation on



Organization	Yes or No	Question 4 Comment
		any entity that they must provide evidence of another party's compliance. It simply provides a few options to consider."
Pepco Holdings Inc.	Yes	Please provide the rational as to why the standard is not applicable to TOs.
		Response: The OPCP SDT thanks you for your comment. Please refer to question 9 in the FAQ document posted on the project page for a response to your comment.
American Electric Power	Yes	AEP believes the most recent changes represent a major step back in regards to clarity (as compared to the draft proposed in October 2013), and has driven us to change our voting position from affirmative to negative. We are concerned by the removal of Reliability Directive, and instead, now basing requirements on whether or not the communications are made during an Emergency. Who determines whether or not an Emergency state exists, and in addition, how would that be communicated? AEP recommends returning to the fundamentals and approach taken in the previous draft. If the phase "Reliability Directive" is to be remanded, we encourage the drafting team to pursue alternative language which would not require the need to know whether or not the communications are being made during an "Emergency". For example, perhaps the drafting team could change R1 (as taken from the October 2013 draft) to state something like the following: "Require the issuer to identify the action as a directive or instruction".R4.
		Response: Please see the summary response to Question 1.
		2: Though M4 specifies the kinds of evidence needed to meet R4, we believe it would be too subjective in determining whether or not the entity's efforts properly assessed the effectiveness of the documented communications protocols.



Organization	Yes or No	Question 4 Comment
		Response: The measures provide various options that the OPCP SDT considered to demonstrate compliance for Requirement R4. It is not intended to be an exhaustive list.
Utility Services, Inc	Yes	Smaller DPs and GOPs will have a significant problems demonstrating compliance with Requirement 6 as written.
		1. As there is no requirement to notify these entities that an Operating Instruction is being issued during an Emergency, they will not be aware of which communications will be subject to compliance review.
		2. Since these entities typically do not record phone conversations they would have to rely on other forms of evidence. Log book enties will not document if three part communication was used and since the entities are not made aware of Emergency conditions, they will not know to maintain a higher level of documentation to demonstrate compliance.
		3. Approaching the issuer for confirmation of OIs during Emergency conditions and seeking Attestations from these entities will create a significant administrative burden not only for the small entities, but for the Issuer of the OI as well.
		4. Any additional tasks that must be performed during Emergency situations runs contrary to the intent of the standard, which is to normalize communication protocols during all situations, and not have separate procedures during normal and Emergency conditions.
		Response: Please see the summary response to Question 1.
Platte River Power Authority	Yes	Platte River takes exception to the requirement for alpha-numeric clarifiers for communications.



Organization	Yes or No	Question 4 Comment
		Response: The OPCP SDT thanks you for your comment but notes the requirement for alpha-numeric clarifiers was from a previous draft of this standard and is no longer contained in the current version.
Nebraska Public Power District	Yes	1) Applicability for Distribution Providers (DP's) should be qualified similar to qualification used for DP applicability in version 5 of CIP-003. Applicability needs to be focused on DP employees that may receive instructions relative to the BES.
		Response: Please see the summary response to Question 1.
		2) R1: Since Requirements R5, R6 and R7 are zero tolerance, R1 protocols should state that when there is an emergency condition on the system that those issuing Operating Instructions during an emergency shall state that "this is an emergency". Reason Number 1, there needs to be a triggering mechanism that tells both the issuer and receiver that 3 part communication is zero tolerance and in effect during an emergency; Reason Number 2, there is question in the industry as to when the "emergency" begins and ends; and Reason Number 3 the RSAW for R5, R6 and R7 are telling the auditor (in the auditors note) to predetermine before an audit what are emergencies on an entities system, which could potentially create an issue of what is a determined emergency between the auditor and the entity. By inserting a triggering mechanism as suggested will create a demarcation for operating instructions during emergencies.
		Response: Please see the summary response to Question 1.
		3) R2 and R3 are already provided for in PER-005 and therefore are redundant in this standard. If there is a need to include a training requirement in this standard, that requirement could consist of a statement to include protocol training in the entity's reliability task list.
		Response: Please see the summary response to Question 1.



Organization	Yes or No	Question 4 Comment
		4) R4 as written puts a huge administrative burden on entities to administer assessments of 'each' of its operating personnel that issue and/or receive Operating Instructions. As in previous drafts of this Standard, entities should determine and document their own assessments to the Standard and so that adherence and effectiveness fits their program. In addition, the 12-month requirement in the Standard now provides for an administrative burden and compliance trap in order to remain compliant to the 12-month requirement. We're a TOP and do many switching orders a day with operating personnel throughout the state. R4 requires us to assess adherence to communications protocols by our operating personnel (see FAQ #22 says "each" issuer/reciever) that receive these operating instructions and provide feedback to the operating personnel, and take corrective actions when appropriate. Currently, we have over 800 switch personnel, and some of these are not NPPD employees. We utilize personnel from some of our public power partners, such as rural power districts and municipalities. The 12 calendar month clock will be different for each person. So, day-to-day will be a challenge to ensure we capture compliance documentation on each person that changes the state of a BES element. The drafting team should revert back language similar to R5 of posting #7 (with exception to the "implement" language) so that entities can manage their own compliance controls and can develop assessments that fit their program. NPPD would suggest the following for Requirement 4:R4. Each BA, RC and TOP shall have a documented method to evaluate the communication protocols developed in R1 that: 4.1 Assess adherence to the communications protocols developed in R1; 4.2 Assess the effectiveness of the communications protocols in R1; 4.3 Provide feedback to issuers and receivers of Operating Instructions; and 4.4 Modify communication protocols as necessary as a result evaluated communication
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "An entity could perform an assessment by listening to random samplings of each of their operating personnel issuing and/or receiving Operating Instructions. If there were instances where an Operator deviated from the entity's protocols, the entity would provide feedback to



Organization	Yes or No	Question 4 Comment
		the operator in question in any method it sees as appropriate. An example would be counseling or retraining the operator on the protocols.
		An entity could assess the effectiveness of its protocols by reviewing instances where operators deviated from those protocols and determining if whether the deviations were caused by operator error or by flaws in the protocols that need to be changed."
		The posted RSAW provides additional guidance on sampling. There was never an intention that every communication of an Operating Instruction must be assessed.
CenterPoint Energy Houston Electric LLC	Yes	CenterPoint Energy would like to thank the COM-002-4 Standard Drafting Team and appreciates the OPCP SDT's time and effort dedicated in the development of this standard, in engaging the industry, and incorporating industry feedback into the standard. The removal of the requirement to identify an Operating Instruction in an emergency or a Reliability Directive to the receiver is viewed as a positive change. CenterPoint Energy believes that operating personnel's focus should always be on monitoring and controlling the reliability of the BES rather than a compliance burden of correctly identifying and aligning company specific communication protocols to normal versus emergency operations. Overall, CenterPoint Energy agrees with the standard, but still has general concerns. The Company believes the prescriptiveness of the requirements: particularly R1.1 thru R1.6 exceeds the necessary components needed in establishing communication protocols for tightened reliable communications.
		Response: The OPCP SDT thanks you for your comment. The OPCP SDT asserts that Requirement R1 Parts 1.1 to 1.6 are an essential set of communication protocols and are not overly prescriptive.



Organization	Yes or No	Question 4 Comment
MISO	Yes	We recommend the drafting team: (1) Remove the attestation for another provision
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "The Measures provide various options that the drafting team considered as ways to demonstrate compliance for Requirement R6. It is not an exhaustive list, and in no way places an expectation on any entity that they must provide evidence of another party's compliance. It simply provides a few options to consider."
		(2) Restrict the zero-defect component of the standard to those operating instructions directly related to the emergency (e.g. redistpach instructions for IROLs, committeent instructions during EEAs, synchronizing during restoration, etc.)
		Response: Please see the summary response to Question 1.
		(3) Maintain Reliability Directives in the toolkit as the clear indicator of an Operating Instruction that is directly applicable to the emergency.
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "The OPCP SDT debated whether to remove the term 'Reliability Directive' in response to comments suggesting it should be removed from the definition of 'Operating Instruction' and in light of FERC's issuance of the TOP/IRO Notice of Proposed Rulemaking (NOPR), which proposes to remand the definition of 'Reliability Directive' along with the proposed TOP and IRO standards. To avoid unnecessary complications with the timing of the NOPR and posting Draft 8, the OPCP SDT consulted with the Project 2007-03 Real-time Transmission Operations and the Project 2006-06 Reliability Coordination Standard Drafting Teams to ask whether they believed removal of the term 'Reliability Directive' in the COM-002-4 standard would cause concerns. Both teams agreed that the COM-002-4 standard did not need to require a protocol to identify Reliability Directives as such and that the definition of Operating Instruction



Organization	Yes or No	Question 4 Comment
		could be used absent the term Reliability Directive in COM-002-4 to set the protocols. The OPCP SDT ultimately voted to remove the term. The OPCP SDT also decided to incorporate the phrase "Operating Instruction during an Emergency" in certain Requirements, where needed, to identify Requirements that are subject to a zero-tolerance compliance/enforcement approach."
		We believe that DPs and LSEs don't need stringent requirements.
		They just need to follow Directives or explain why they cannot. We understand that the drafting team is trying to meet a deadline, however we'd support the drafting team addressing all of the industry comments even if it requires more time to get this standard right.
		Response: COM-002-4 is not applicable to LSEs. DPs only have two applicable requirements.
		24. 2. 2. 2.
PJM Interconnection	Yes	PJM supports the draft standard as it strikes a good balance between the industry and the NERC BOT November, 2013 resolutions. The standard provides the industry some flexibility regarding how communication protocols are developed. It also makes it cleaner and easier for operators to use the same protocol for all Operating Instructions, whether in an emergency or not, while not burdening System Operators with issues around how compliance will be measured. PJM does not support the addition of a new training requirement under R1. PJM recommends that all training requirements be included in one standard and not spread throughout families of standards. Consolidation of all training requirements under a single training standard will help in development of a clear, more organized training process.



Organization	Yes or No	Question 4 Comment
Georgia System Operations Corporation	Yes	With consideration that an Emergency may not be initially recognized by system operators for several minutes, GSOC requests Requirements R5 thru R7 include the word "recognized" precede the work "Emergency". GSOC cites the newly effective EOP-004-2, R2 currently affords this consideration. It requires reporting "within 24 hours of recognition of meeting an event type threshold". In addition, GSOC recommends R5 thru R7 replace the words "during an Emergency" with "addressing a recognized Emergency" so as to avoid confusion should there be Operating Instructions issued during an Emergency that may have nothing to do with an Emergency.
		Response: Please see the summary response to Question 1.
		GSOC suggests that the "assess adherence and assess effectiveness" language in R4 be removed from COM-002-4. This language is similar to the "Identify, Assess and Correct (IAC)" language that was included in the CIP V5 standards. The removal or modification of this language was included in the Final Rule on NERC CIP V5 Standards (Order No. 791). FERC stated that IAC language and concepts would be best addressed in the NERC compliance processes, such as through the NERC Reliability Assurance Initiative (RAI), rather than standards requirements
		Response: The OPCP SDT asserts that there is a substantive enough difference in the language of COM-002-4 and CIP version 5 so as not to be problematic. FERC stated concern was with the ambiguity around "identify, assess, and correct." The OPCP SDT added clarifying language in the requirements to specify the actions that an entity is expected to take.
Electric Reliability Council of Texas, Inc.	Yes	ERCOT ISO believes the draft standard could be improved and offers the following suggestions for the OPCP SDT's consideration.
		Definition of Operating Instruction. The definition of Operating Instruction could be improved by making the following changes:1) Delete the word "interconnected"



Organization	Yes or No	Question 4 Comment
		before BES in the first sentence. It is not used instances where BES is used. Unless there is a substantive reason for using interconnected in some BES references and not others, the standard should be consistent to mitigate ambiguity;2) "Potential Options" in the parenthetical is redundant - delete "potential". Also, "option" and "alternatives" in the parenthetical are also redundant - delete one of them;3) The parenthetical doesn't need to be a parenthetical - make it the last sentence in the definition. As revised, the definition would read as follows: Operating Instruction - A command by operating personnel responsible for the Real-time operation of the Bulk Electric System (BES) to change or preserve the state, status, output, or input of an Element of the BES or Facility of the BES. A discussion of general information to resolve BES operating concerns is not a command and is not considered an Operating Instruction.
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		Purpose Section: The purpose statement could be improved by making the following changes:1) Delete "the issuance of" in the first sentence. It is inherent that a communication is "issued". Therefore, this language is superfluous and should be deleted to mitigate any potential ambiguity;2) Delete "predefined" in the first sentence. This adjective is not needed - the existence of communication protocols means they are predefined. Therefore, this is superfluous language and should be deleted to mitigate potential ambiguity. As revised, the purpose section would read as follows:Purpose: To improve communications for Operating Instructions with communications protocols to reduce the possibility of miscommunication that could lead to action or inaction harmful to the reliability of the Bulk Electric System (BES).
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		Requirements SectionR1



Organization	Yes or No	Question 4 Comment
		1) ERCOT ISO disagrees with changing "have" to "develop" in the first sentence. The point of this requirement is to have protocols that meet the minimum requirements. Obviously, in order to have the protocols an entity would need to develop them, but that is not the focus - as noted, having the protocols is the intent;2) Change "and" to "or" in the following - "for its operating personnel that issue or receive Operating Instructions" The intent is to make the obligation to have protocols applicable to all operating personnel of the relevant functions. It may be that some functions only issue or only receive operating instructions. In those cases this requirement would not apply to those entities because the requirement is conjunctive - issue and receive. By making it disjunctive by using "or" the requirement applies to all circumstances - i.e. issue and receive or just issue or just receive;3) The change suggested in (2) above should be made in R1.1 as well;
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		4) Also in R1.1, the triggering condition for using another language besides English - i.e. "unless otherwise agreed to" - is unclear in terms of how that would work. How do you demonstrate that such an agreement is in place? Also, practically speaking, the ability to reach such an agreement assumes that all operators are capable of speaking the alternative language. It seems way too complicated because it would depend on the languages spoken by the different operators at different entities, and their schedules would have to be coordinated. These issues are less of a concern for allowing alternative languages for internal communications because the entity's personnel know one another and are located in the same place/organization. ERCOT ISO appreciates the intent of allowing for this exception, but it is difficult to see how it would work in practice, and even assuming it could work, the requirement is unclear as to what sort of agreement would be required;
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "The drafting team included this part to carry forward the same use of English language included in COM-001-1,



Organization	Yes or No	Question 4 Comment
		Requirement R4 and to retire this requirement from COM-001. The requirement continues to permit the issuer and receiver to use an agreed to alternate language. This has been retained since use of an alternate language on a case-by-case basis may serve to better facilitate effective communications where the use of English language may create additional opportunities for miscommunications. Part 1.1 requires the use of English language when issuing oral or written (e.g. switching orders) Operating Instructions. This creates a standard language (unless agreed to otherwise) for use when issuing commands that could change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. It also clarifies that an alternate language can be used internally within the organization. The phrase has been modified slightly from the language in COM-001-1, Requirement R4 to incorporate the term 'Operating Instruction,' which defines the communications that require the use of the documented communications protocols."
		5) R1.2 - Change "repeated information" to "response". First, this change promotes consistency in terminology. Second, it is more consistent with the intent that the receiver is not required to repeat the directive verbatim - response contemplates flexibility as long as intent is there, while repeated information seems to require a verbatim reply;
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		6) The last bullet in R1.2 requires the issuer to take an alternative action if a response is not received or if the instruction is not understood. It is unclear what this means. Is the obligation related to trying to re-issue the instruction, or does it require the issuer take an alternative operating action? This is a communications standard, not an operations standard. Accordingly, the intent of this bullet should be clarified, and if it requires the issuer to take an alternative operating action, ERCOT ISO questions whether that obligation should be in a COM standard. Operational requirements are already covered in other standards, and if entities act under those other standards



Organization	Yes or No	Question 4 Comment
		then the relevant communications protocols would apply to those "alternative" operating actions. ERCOT ISO believes that the "alternative action" described in the third bullet of R1.2 and R5 should be limited only to communications and not operating actions. ERCOT ISO would recommend replacing R1.2 and R5 third bullet with the following: Attempt an alternative means to communicate the Operating Instruction if a response is not received or if the Operating Instruction was not understood by the receiver, if deemed necessary by the issuer .ERCOT ISO also recommends including "or receiving" to capture that the training should be prior to that individual operator issuing 'or receiving' an Operating Instruction to address the subparts of R1 that deal with receiving Operating Instructions.
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "If an operator issues an Operating Instruction during an Emergency and, based on the response from the receiver, or lack thereof, chooses to take an alternative action, that operator has satisfied Requirement R5 and is not in violation." It does not require an alternate action, but it allows the operator to take an alternate action if necessary and not be in violation of the requirement for three-part communication.
		7) R1.4 - Delete "single-party". It is clear that an issuer is one entity without having to add "single-party". Accordingly, this is superfluous language and should be deleted to mitigate ambiguity. If this deletion is made, "operating instruction" would have to be moved to where "single-party" was in the sentence;8) R1.4 requires the issuer to "confirm" or "verify" that the instruction was received by at least one entity. They are the same thing - delete one of them for clarity and to mitigate ambiguity;
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		9) R1.5 requires the communication protocols to specify the instances where time identification is required and to specify the format for time identification. As written, this appears to require the protocols to specifically list all relevant instances and, where relevant, requires the use of a specific time ID format. The OPCP SDT should



Organization	Yes or No	Question 4 Comment
		consider revising this so the requirement imposes a general obligation for the protocols to time ID instructions when necessary, but not require the establishment of an exclusive list. This will accomplish the goal of time stamping and provide the entity with flexibility to implement the requirement, which will also mitigate the need to revise protocols if an entity determines prospectively that time ID is not needed in some instances on the list and is needed in other instances that are not on the list. Similarly, the protocols should not require a specific format. Providing flexibility with respect to format will mitigate the potential for form over substance violations of the protocols - time ID is the point, not the format;
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "The OPCP SDT has included this part to add necessary clarity to Operating Instructions to reduce the risk of miscommunications. The inclusion of 'specify when time identification required' allows for an entity to evaluate its particular circumstances and communications to determine when it may be appropriate to use time identification in its Operating Instructions. The drafting team recognized from comments the need to provide this flexibility while still requiring an entity to address this part in its documented communication protocols. Clarifying time and time zone (where necessary) contributes to reducing misunderstandings and reduces the risk of a grave error during BES operations. This is not exclusively for entities in multiple time zones, but Operating Instructions between entities in multiple time zones is one example of instances that may need time identification when issuing and receiving Operating Instructions."
		10) R1.6 requires the protocols to establish nomenclature for transmission elements. It is unclear how this will facilitate clearer communications unless all entities that are issuers or recipients of instructions use the same nomenclature. As drafted, it appears that it is an independent obligation that applies to each entity. If that is the case, each entity could use different nomenclature, which arguably could have a negative impact on communications.



Organization	Yes or No	Question 4 Comment
		Response: Please see the summary response to Question 1.
		R4 1) ERCOT ISO understands the inclusion of R4 as a means to make normal operations Operating Instructions not subject to zero tolerance enforcement. However, ERCOT ISO has reservations concerning potential subjectivity surrounding who determines "appropriate" and "as necessary". As a general comment, these types of "internal controls" requirements are better handled through the RAI initiative and subsequent CMEP processes. However, if the language remains, ERCOT ISO believes the clarity and effectiveness of the standard will benefit by clarifying that the entity who is conducting the assessments determine the appropriateness and necessity, and that the role of the ERO is simply to review if such activities were performed. ERCOT ISO recommends modifications as below. 4.1. Assess adherence by its operating personnel that issue or receive Operating Instructions to the documented communications protocols 'required' in 'by the subparts' of Requirement R1, , provide feedback to those operating personnel and take corrective action, as 'deemed' appropriate 'by the entity' to address deviations from the documented protocols.4.2. Assess the effectiveness of its documented communications protocols 'required' in 'by the subparts of' Requirement R1, for its operating personnel that issue or receive Operating Instructions and modify its documented communication protocols, as 'deemed' necessary 'by the entity'. Additionally, ERCOT ISO recommends including language to specify that R4 only be required to apply to those communication protocols that are identified in the subparts of R1, and not to other practices that an entity may choose to employ or improve upon. This clarification will mitigate creating a "fill in the blank" type standard approach for future potential changes to the R1 documented communication protocols.
		Response: The OPCP SDT considered your suggestion and made non-substantive clarifying changes to the wording of Requirement R4.
		R51) How does the term "Emergency" in this requirement align with/relate to the term "Reliability Directive" in other standards, both in terms of meaning and scope of related responsibilities - is there overlap that could create ambiguity or unnecessary



Organization	Yes or No	Question 4 Comment
		redundancy? There is a concern regarding the use of "Operating Instruction during an Emergency". While ERCOT ISO understands the rationale behind replacing Reliability Directive with the new terminology based on the FERC NOPR potentially remanding the term, to avoid overlap/redundancy/confusion if this is retained, any potential conflicts must be addressed through other projects. Use of Reliability Directive up until this draft created clear synergy between COM-003/002 and the IRO/TOP revisions. If the term is not remanded, ERCOT ISO would support a more uniform approach by including Reliability Directive;
		Response: Please see the summary response to Question 1.
		2) Change "repeated information" to "response" in first two bullets. See comment 5 in R1 comments above for rationale for this suggested change;3) Third bullet - see comment 6 under R1 comments - same comment for the third bullet under R5;
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		R71) Delete "single party" and delete either "confirm" or "verify" - see comments 7 and 8 under R1 for rationale for these suggested revisions.
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		Measures
		M4 is too prescriptive and inappropriately imposes requirements on the entity. This measure should align with previous comments concerning R4. M4 should be modified to reflect appropriate measures or types of evidence that should be provided without being overly prescriptive with respect to the level of quality of evidence. Additionally each part should be included and reflect the requirements without imposing additional requirements.
		Response: The OPCP SDT considered your suggestion and made non-substantive clarifying changes to the wording of Measure M4. In addition, the list of evidence is



Organization	Yes or No	Question 4 Comment
		not an exhaustive list and in no way places an expectation on any entity that they must provide evidence of another party's compliance. It simply provides a few options to consider.
		M5-M7 should not identify attestations from the issuer or include "dated and time stamped" as part of the measure. Compliance should be demonstrated by the relevant entity - third parties should not be required either directly or indirectly to support the compliance activities of another entity by providing attestations. "Dated and time stamped" goes to the quality of evidence and is not appropriate for a measure. ERCOT ISO comments that inclusion of attestations, documented observations, procedures, or other equivalent evidence would improve M5-M7.
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "The Measures provide various options that the drafting team considered as ways to demonstrate compliance for Requirement R6. It is not an exhaustive list, and in no way places an expectation on any entity that they must provide evidence of another party's compliance. It simply provides a few options to consider." The same comment applies to Measures M5 and M7.
Indiana Municipal Power Agency	Yes	Requirement R3 is not clear in defining if it covers all Operating Instructions received by a Distribution Provider and Generator Operator. Distribution Providers and Generator Operators can receive Operating Instructions from outside parties (Balancing Authority, Reliability Coordinator, and Transmission Operator) and from internal parties (its own Market Operations). The current word in Requirement 3 requires Distribution Providers and Generator Operators to repeat back both outside and internal parties Operating Instructions. IMPA does not believe this was the intent of the OPCP SDT since there are no requirements that cover Distribution Providers or Generator Operators issuing Operating Instructions (the Generator Operator's Market Operations issuing an Operating Instruction to its generating power plant; Generator



Organization	Yes or No	Question 4 Comment
		Operators cannot issue Operating Instructions to any Registered Entities such as the Balancing Authority or Reliability Coordinator). IMPA also believes that operating personnel need to know at the time an instruction is given if it is an Operating Instruction or a Directive. This clarification needs to come from the entity giving the instruction and reviewing the call afterwards to make that determination is very problematic.
		Response: The OPCP SDT thanks you for your comments and has considered them. The definition of Operating Instruction is "A command by operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. (A discussion of general information and of potential options or alternatives to resolve Bulk Electric System operating concerns is not a command and is not considered an Operating Instruction.)" Conversations concerning market dispatch are not considered Operating Instructions. The OPCP SDT addressed the issue of identifying Emergencies in the FAQ document posted on the project page. The following response was provided: "Separately listing out Requirements R5, R6, and R7 and using 'Operating Instruction during an Emergency' in them does not require a different set of protocols to be used during Emergencies or mandate the identification of a communication as an 'Operating Instruction during an Emergency.' The same protocols are required to be used in connection with the issuance of Operating Instructions for all operating conditions. Their use is measured for compliance/enforcement differently using the operating condition as an indicator of which compliance/enforcement approach applies. In other words, it is not the drafting team's expectation that the operator must differentiate between Emergency and non-Emergency Operating Instructions."



Organization	Yes or No	Question 4 Comment
New York Independent System Operator	Yes	The NYISO would like to request confirmation that Operating Instructions are limited to verbal or written communications and that electronic dispatch signals are not in scope for this standard. The NYISO would also note that we support comments submitted by both the IRC/SRC and NPCC/RSC.
		Response: The OPCP SDT thanks you for your comments. The definition of Operating Instruction was intentionally written broadly to include many forms of communication. The requirements in COM-002-4 only apply to oral and written Operating Instructions. Electronic dispatch signals are not in the scope of COM-002-4.
Northeast Utilities	Yes	Comment 1 Systematic Approach to Training is already covered in PER-005-1 and including a requirement for training would seem to be redundant.
		Response: Please see the summary response to Question 1.
		Comment 2 The applicability of Distribution Provider (DP) functional responsibility presents potential for confusion. New England LCC's (Transmission Operators) operate at the direction of ISO-NE the Regional Transmission Operator (RTO) and enforcing the communication protocols to distribution companies/distribution providers may present challenges, identifying, documenting and implementing COM-002-4 to the DP.
		Response: Please see the summary response to Question 1.
		Comment 3 The language used in Requirement 1.6 is vague and needs to be clarified for Registered Entities to know how to comply with it. How would one "specify nomenclature" system-wide?



Organization	Yes or No	Question 4 Comment
Oncor Electric Delivery Company LLC	Yes	Oncor recommends Requirement 4 and Measurement 4 be removed. The "assess adherence and assess effectiveness" language mirrors the same concepts as the "Identify, Assess and Correct (IAC)" language that was included in the CIP V5 standards which FERC directed the removal of. The removal or modification of this language was included in the Final Rule of NERC CIP V5 (Order No. 791). FERC stated that IAC language was "overly-vague, lacking definition and guidance is needed" and that these control concepts would be best addressed in the NERC compliance processes, such as through the NERC Reliability Assurance Initiative (RAI), rather than standards requirements. Reliability Standards must be revised to focus on strategic and critical reliability objectives incorporating requirements for meeting and sustaining reliability of the BES. The current state of Standards must transition from a prescriptive zero tolerance approach to results-based requirements which assure the reliability and security of the critical infrastructure. A reliability results-based approach should not be an additive to the Reliability Standards; hence, controls requirements should not be incorporated within the Standards, rather controls should be considered at the Program level. Reliability Standards should define the results ("what") Entities are mandated to meet and maintain and the "how" should be handled by each Entity for there is not a "one size fits all". Incorporating detective controls as requirements and prescriptive measurements can lead to unintended consequences and again, an additive versus a process that helps provide a registered entity with reasonable assurance they comply with the Standard(s) or the operating function(s) and processes that the Standard(s) require.
		Response: Please see the summary response to Question 1.
		Rewording of R1.6 as follows: "Specify the nomenclature to be used for Transmission interface Elements and Transmission interface Facilities when issuing an oral or written Operating Instruction to Neighboring Entities." While the Technical Justification document suggests that R1.6 applies to communication with neighboring entities, it is unclear that this requirement, as worded in the current draft of COM-002-4, is specifically discussing communication with neighboring entities.



Organization	Yes or No	Question 4 Comment
		Response: Please see the summary response to Question 1.
		M2 should include "initial training" and be reworded as follows in order to maintain consistency with the requirement: "Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide initial training records related to its documented communications protocols developed for Requirement R1 such as attendance logs, agendas, learning objectives, or course materials in fulfillment of Requirement R2."
		Response: The OPCP SDT considered your suggestion and made non-substantive clarifying changes to the wording of Measure M2.
Exelon Corp and its affiliated business units	Yes	o A "qualified" application of COM-002-4 for a DP that performs voltage reduction or load shedding as directed by an RC, BA or TOP could clarify the standard and place the emphasis on the functional entities that matter most.
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		o Remove R6 and M6. The BA, RC or TOP, as issuers, record Operating Instructions (OI). R1.2 requires an entity issuing an OI to confirm the receiver's response, reissue if necessary and take alternate action if the receiver does not confirm or understand the OI. Similarly, per R5, issuers of an OI are required to confirm the receiver's response, reissue if necessary and take alternate action if the receiver does not confirm or understand the OI. There is little reliability benefit in requiring the DP and GOP receiver documenting their role in this exchange. The training requirement for receivers of OI's in R3 is sufficient.
		Response: The OPCP SDT chose to include Distribution Providers and Generator Operators in the Applicability section because they can be on the receiving end of some Operating Instructions. The OPCP SDT determined that if Distribution Providers and Generator Operators were not included as applicable entities in this



Organization	Yes or No	Question 4 Comment
		standard, it could create a gap. Additionally, it is important that the Distribution Provider and Generator Operator perform three-part communication when receiving an "Operating Instruction during an Emergency." That necessitates Requirement R6.
		o If R6 and M6 are not removed.R6. To clarify, suggest that the word "Operating Instruction" be inserted after "excluding written" so it is clear it is applicable to both conditions.M6. Need a comma after "voice recordings" so as to separate it from dated operator logs.
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.
		"Voice recordings" is repeated twice in M6. M7. "Voice recordings" is repeated twice in M7.
		Response: The OPCP SDT considered your suggestion and made non-substantive clarifying changes to the wording of Measures M6 and M7.
		o R6 / M6. Exelon is concerned that demonstrating compliance with R6 may prove difficult for some entities. A generator operator may not have voice recording available at the entity's facility and it may not be possible to procure voice recording or attestations from the issuer of an Operating Instruction. The measurement says dated operator logs are acceptable evidence. The RSAW further discusses auditor discretion and risk assessment respecting this requirement and measure. If audited per the measurement and RSAW guidance, log entries would be acceptable evidence but we are concerned that an auditor may find otherwise.
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "The Measures provide various options that the drafting team considered as ways to demonstrate compliance for Requirement R6. It is not an exhaustive list, and in no way places an expectation on any entity that they must provide evidence of another party's compliance. It simply provides a few options to consider."



Organization	Yes or No	Question 4 Comment
		o Should this proposal fail to pass ballot, we encourage the drafting team to build on the positive work done in this version and address the compliance concerns that remain. All stakeholders would be best served if this standard could incent improvement in communication through effective self-assessment and applied lessons learned. This iteration presents an opportunity to truly step away from placing the compliance burden that judges operators for their use of three-part communication and to focus on programmatic measures to promote effective communication. Specifically, replacing R5, R6 and R7 with meaningful assessment criteria to include in entity review programs could increase the qualitative components of the program, focus on efforts to improve effective communication and remove the zero tolerance compliance approach that currently exists. O While it's been difficult to keep "starting over" with new standard language approaches, we believe that this version sets solid groundwork to address the hurdles and conflicts of previous approaches. Should more time be allowed to continue development of this most recent proposal, we would welcome the chance to discuss our ideas further.
Xcel Energy	Yes	Xcel Energy is voting negative because the standard no longer contains clarity for all parties on when they have entered an emergency state and therefore 3-part communication would be required. Since the requirements to conduct 3-part communication on emergency operating instructions will remain zero tolerance, it is important that the line of when the entity entered an emergency state be clear to the
		registered entities involved as well as ERO compliance and enforcement personnel. We think incorporating some of the mechanics from COM-002-3 could easily remedy our concerns. Alternatively, please consider requiring an Operating Instruction that is issued during an Emergency situation be identified as 'This is an Emergency.'.



Question 4 Comment
he following comments for consideration:
R3 and R4 - The term "operating personnel" is used and ard. This term is undefined and it is unclear to which ications protocol applies. ReliabilityFirst recommends defining my confusion and remove any questions around who generated personnel". ReliabilityFirst suggests replacing the term with the draft PER-005-2 definition of "System Operator" (e.g., rol Center of a Balancing Authority, Transmission Operator, or who operates or directs the operation of the Bulk Electric"). ReliabilityFirst believes it is the intent of the standard to operate or direct the operation of the Bulk Electric System in ersonnel that may be involved in supporting roles.
d. However, since the standard applies to Distribution or Operators, the term could not be used without altering the impact other standards.
e intent of Requirement R4
possible violations for deviations to the context of emergency equiring that Responsible Entities to assess and correct ate" in the non-Emergency setting. ReliabilityFirst is concerned propriate" is vague and creates concerns similar to those ission in Order 791. In Order 791, the Commission supported to a framework for the ERO Enterprise's use of discretion in the land enforcement space, but rejected the codification of the language within the CIP Version 5 Reliability Standards is abilityFirst is also concerned that the qualifier "as secretion within COM-002-4. ReliabilityFirst believes that
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Organization	Yes or No	Question 4 Comment
		ERO Enterprise should utilize discretion in the compliance monitoring and enforcement space when determining the relevant scope of audits and whether to decline to pursue a noncompliance as a violation. With the RAI, the ERO Enterprise is developing a singular and uniform framework to inform the ERO Enterprise's use of discretion in the compliance monitoring and enforcement space. Therefore, ReliabilityFirst recommends removing the qualifier "as appropriate" from R4.1 and allowing the ongoing RAI effort to create a meaningful and unambiguous framework that the ERO Enterprise will utilize to inform its use of discretion in the compliance monitoring and enforcement of all Reliability Standards. ReliabilityFirst cautions that codifying discretion in some Reliability Standards may create confusion once the ERO Enterprise begins to implement RAI discretion in its compliance monitoring and enforcement work. For example, there may be confusion of whether discretion codified in certain Requirements of Reliability Standards precludes the ERO Enterprise's use of RAI discretion for those Requirements where discretion is not codified.
		Response: The OPCP SDT considered your suggestion and made non-substantive clarifying changes to the wording of Requirement R4. Concerning your RAI comment, please see the summary response to Question 1.
		b. Flowing from 2.a. above, ReliabilityFirst recommends that Measure 4 be modified to remove discretion, and should read as follows:M4. Each Balancing Authority, Reliability Coordinator, and Transmission Operator shall provide evidence of its assessments, including spreadsheets, logs or other evidence of feedback, findings of effectiveness and any changes made to its documented communications protocols developed for Requirement R1 in fulfillment of Requirement R4. The entity shall also provide evidence that it took appropriate corrective actions as part of its assessment for all instances of operating personnel's nonadherence to the protocols developed in Requirement R1.
		Response: The OPCP SDT clarified the language in Measure M4 to better align with the language in Requirement R4.



Organization	Yes or No	Question 4 Comment
California ISO	Yes	1. Requirement R4 is an administrative task, not a reliability-related task. The ISO does not see the value added or where BES reliability is enhanced by R4. 2. The ISO uses an Automated Dispatch System (ADS) to direct dispatch levels of generation in the ISO Balancing Authority Area. Though different ADS instructions are sent to multiple parties (different Generators) each individual instruction is an electronic communication that is "resource specific" (i.e we send one resource an electronic communication to position its unit at a specific level and another resource a different electronic communication to position its resource at a different level, etc.) In this respect the ISO considers the ADS to be a "single-party to single-party" communication rather than a "single-party to multiple-party burst" communication. The ISO requests standards drafting team confirmation that it does not interpret R1.4 (or R7 which contains similar language in the Emergency context) to apply to resource-specific ADS dispatch instructions.
		Response: The OPCP SDT thanks you for your comments. The definition of Operating Instruction was intentionally written broadly to include many forms of communication. The Requirements in COM-002-4 only apply to oral and written Operating Instructions. Electronic dispatch signals are not in the scope of COM-002-4.
Tri-State Generation and Transmission Association Inc.	Yes	Tri-State G&T disagrees with removing the term reliability directive. The proposed definition for Reliability Directive should be modified to provide technical justification, as requested in the November 21, 2013 FERC NOPR, and require Reliability Coordinators to use Reliability Directives to issue instructions to maintain reliable operations. As addressed in the NOPR, Reliability Directives from an entity responsible for the reliable operation of the BES should be mandatory at all times, not just during emergencies. Owners, Operators and others responsible for reliability of the BES have



Organization	Yes or No	Question 4 Comment
		used the term reliability directive effectively for many years. Removing this term does not enhance the reliability of the BES and places a burden on industry to adjust to accommodate a new method to accomplish what is done today with reliability directives. Our proposal is to make Reliability Directives applicable to RC, TOP and BA's to ensure reliable operation the BES.
		Response: The OPCP SDT addressed this issue in the FAQ document posted on the project page. The following response was provided: "The OPCP SDT debated whether to remove the term 'Reliability Directive' in response to comments suggesting it should be removed from the definition of 'Operating Instruction' and in light of FERC's issuance of the TOP/IRO Notice of Proposed Rulemaking (NOPR), which proposes to remand the definition of 'Reliability Directive' along with the proposed TOP and IRO standards. To avoid unnecessary complications with the timing of the NOPR and posting Draft 8, the OPCP SDT consulted with the Project 2007-03 Real-time Transmission Operations and the Project 2006-06 Reliability Coordination Standard Drafting Teams to ask whether they believed removal of the term 'Reliability Directive' in the COM-002-4 standard would cause concerns. Both teams agreed that the COM-002-4 standard did not need to require a protocol to identify Reliability Directives as such and that the definition of Operating Instruction could be used absent the term Reliability Directive in COM-002-4 to set the protocols. The OPCP SDT ultimately voted to remove the term. The OPCP SDT also decided to incorporate the phrase 'Operating Instruction during an Emergency' in certain Requirements, where needed, to identify Requirements that are subject to a zero-tolerance compliance/enforcement approach."
		The term Operating Instructions should be applicable to Operators who issue commands to control elements essential to the reliable operation of the BES. We do not believe the term, as currently defined, should apply to Reliability Coordinators. According to the NERC Functional Model, Reliability Coordinators are not real time operators and are not operating personnel. Reliability Coordinators oversee the reliability of the BES and direct real time operations as needed to assure reliability of the BES.TSGT requests clarification of the term operating personnel, which positions is

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Organization	Yes or No	Question 4 Comment
		this term referring to? As previously stated, if operating personnel are the personnel that operate BES elements, then operating personnel should not include Reliability Coordinators since that is not the role they currently provide.
		Response: Since Reliability Coordinators "direct Real-time operations as needed to assure reliability of the BES," they can issue Operating Instructions and, as such, must be applicable entities to this standard.
		TSGT requests clarification on the proposed multiple-party burst communication. This method of communication is not widely used and we are concerned that the use of this type of communication may create additional reliability issues.
		Response: Information about multiple-party burst communication may be found in the Operating Committee "Reliability Guideline: System Operator Verbal Communications – Current Industry Practices" located at <a href="http://www.nerc.com/comm/OC/Related%20Files%20DL/OC%20Approved COM-002-2%20Guideline 6-24-2012">http://www.nerc.com/comm/OC/Related%20Files%20DL/OC%20Approved COM-002-2%20Guideline 6-24-2012</a> For%20Posting w%20line%20numbers Clean Version%202.pdf.
		TSGT requests a clarification of time identification in R1.5.  Response: Please see the summary response to Question 1.
		,,,,,,,, .
The Empire District Electric Company	Yes	I feel that the requiment to an assessment to communication protocols is somewhat excessive and should be left as a part of the audit process or following NERCs RAI directive be left up to the internal compliance department of the company rather than having this as a requirement in the standard.
		Response: Please see the summary response to Question 1.



Organization	Yes or No	Question 4 Comment
HHWP Yes	Yes	I appreciate the work done on this Standard by the OPCP SDT. The current version of the draft is much improved. I propose one change before supporting this proposed standard. That change is in Requirement 4 where I believe the standard would be improved by replacing the "at least once every twelve (12) calendar months" language with "at least annually, with no more than X months between reviews." Such a change to the language or Requirement 4 would allow each entity to determine the best cycle for its review of adherence to and effectiveness of its communications protocols per CAN-0010. If that language is used, I believe that 15 months is an appropriate value for 'X'.
		Response: The OPCP SDT considered your suggestion but asserts that the existing language provides sufficient clarity.

## **Additional Comments**

Avista Utilities Scott Kinney

## Comment:

Although we believe the team made significant improvements to the standard, and support a 3-part communication standard, we are concerned that the scope of the standard and the sheer number of operating communications may overwhelm entities in terms of monitoring and evidence retention. COM-002-4 will require all communication channels to not just be recorded (which is done today) but will require a sampling of the recordings to be reviewed by compliance personal for self-monitoring purposes, provide documented feedback to operating personnel and provide samples to auditors. This standard may result in the registered entities spending more time monitoring and collecting data than the realized reliability benefits. Also, the evidence that is produced and provided to the auditors leaves much open for interpretation. We are concerned an auditor may not be able to differentiate between 'emergency' and 'non emergency' operating instructions for audit purposes.

Consideration of Comments: Project 2007-02 COM-002-4

Posted: March 27th, 2014



Response: Please see the summary response to Question 1.

**END OF REPORT**